

EXHIBIT 3
[FILED UNDER SEAL]

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1 P R O C E E D I N G S

2 (Tuesday, December 17, 2024 at 9:09 a.m. EST)

3 THE VIDEOGRAPHER: We are now on the record.
4 My name is Danny Ortega, and I am the legal
5 videographer for Golkow Litigation Services.

6 Today's date is December 17th, 2024, and the
7 time is 9:09 a.m.

8 This video deposition is being held at 175
9 Greenwich Street, New York, New York, in the matter of
10 the State of Texas, et al. versus Google, LLC.

11 The deponent today is Michael Malkiewicz.

12 All counsel will be noted on the stenographic
13 record.

14 The court reporter today is Jennifer Dunn and
15 will now swear in the witness.

16 MICHAL A. MALKIEWICZ,
17 of lawful age, having been first duly sworn to tell the
18 truth, the whole truth and nothing but the truth, deposes
19 and says on behalf of the Plaintiffs, as follows:

20 EXAMINATION

21 BY MR. COLLIER:

22 Q Good morning, Mr. Malkiewicz.

23 A Good morning.

24 Q When does a company have a duty to begin
25 preserving documents?

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1 A It's not an area of my expertise. I have a
2 general understanding from the documents I've reviewed in
3 this case and in preparation for today.

4 Q Okay. And you may help me short circuit things
5 with that answer.

6 So you're not an expert in when a company should
7 preserve documents, right?

8 A That is fair, yes.

9 Q And you're not an expert in the industry standards
10 on when companies preserve documents, are you?

11 A I am not. That's correct.

12 Q What is your lay person's understanding of when a
13 company should preserve documents?

14 A What my lay person understanding is that the
15 company should preserve documents around the time where it
16 anticipates litigation or an investigation, but that's
17 really the extent of my understanding.

18 Q When did Google anticipate an investigation on its
19 ad tech practices?

20 A I do not know as I sit here.

21 Q What is your understanding of the day that Google
22 should have began preserving documents?

23 Let me ask it a little cleaner way.

24 We talked in general about companies. I just want
25 to make sure that includes Google, so let me ask the

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1 question this way.

2 It is your understanding that Google should
3 preserve documents beginning around the time it anticipates
4 litigation or an investigation?

5 A I mean, again, as a lay person, I'm not an expert
6 in the field, that would sound reasonable.

7 Q Okay. And as we sit here today, you just don't
8 know when Google anticipated litigation or an investigation
9 into an ad tech practices?

10 MR. MCCALLUM: Object to the form.

11 THE WITNESS: That's correct. I don't know
12 that date or information.

13 BY MR. COLLIER:

14 Q All right. Do you have an understanding as to how
15 clear a company should be in its instructions to employees
16 on when to preserve documents?

17 MR. MCCALLUM: Object to the form.

18 THE WITNESS: Again, only as a lay person.
19 And if you use the word "clear," that sounds reasonable
20 to me, but I don't know any details of what that might
21 actually entail.

22 BY MR. COLLIER:

23 Q Right. And just to be clear, you're not a lawyer,
24 right?

25 A That's correct. I'm not a lawyer.

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1 Q And you've never taken any eDiscovery training?

2 A I have taken eDiscovery trainings over the year,
3 but I'm not a lawyer and not an expert in the field
4 certainly.

5 Q In those eDiscovery trainings, did you learn that
6 if there is a possibility a document could be relevant to a
7 litigation or an investigation it should be preserved?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: I would not have recalled a
10 specific instruction like that, but generally that
11 would be consistent with my understanding of what, you
12 know, something like a litigation hold would entail.

13 But again, as I sit here, I don't have a
14 specific recollection of the actual wording or what
15 the -- just more of the intent of the training.

16 BY MR. COLLIER:

17 Q Did you say more of the intent?

18 A Right. What the intent was of what I was learning
19 as opposed to, you know.

20 Q Well, the intent was to preserve documents so, in
21 part, no one would accuse you of spoliating documents,
22 right?

23 MR. MCCALLUM: Object to the form.

24 THE WITNESS: That I just don't know what
25 might be the reason or consequences.

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1 BY MR. COLLIER:

2 Q And I'm going to ask you a few more questions in
3 this area, sir, and I promise you, I understand you're not
4 an expert in the field, I'm just going to try to understand
5 what as a lay person you understand, so please don't take
6 any offense. If you don't know the answer or it seems like
7 I'm trying to get you to testify outside your field, I'm
8 not, I'm just exploring what you know as a non-expert, if
9 that's okay.

10 A That's okay.

11 Q Have you used Google Chats?

12 A I do not recall specifically. I may have, but I
13 don't recall, because of the transition period between
14 Google Hangouts and Google Chat, but that would be the time
15 period that I potentially personally used the Google Chat or
16 Google Hangouts.

17 Q In what job would you have used Google Chats, if
18 at all?

19 A Personal capacity --

20 Q Or are you saying in your personal?

21 Okay. Apologies.

22 And I interrupted you, so it's a good time for me
23 to remind myself and you. I know you've given many
24 depositions, but if you'll try to let me finish the question
25 before you answer, and equally important for me, I'll try

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1 not to accidentally cut off your answer. That's never my
2 intention.

3 Fair?

4 A Very fair. Understood.

5 Q And where were you born?

6 A In Poland.

7 Q Okay. Well, you can probably tell I'm from Texas,
8 and so I speak very slow, and sometimes people think I'm
9 done talking but I'm still finishing my sentence. I'm not
10 very bright perhaps, but if you'll just make sure I get all
11 the way till the end of my question before you answer; is
12 that fair?

13 A That's fair.

14 Q So you're not sure if you've ever used Google
15 Chats or Google Hangout, but you can't swear you haven't; is
16 that fair?

17 A Well, I'm confident, as I sit here, I've used
18 Google Hangouts.

19 Q Okay.

20 A But I'm just not sure if I continued to use it
21 when the total transition to Google Chat, because it would
22 have been around the time of transition, so, you know, now
23 would be more than a decade ago, or about a decade ago.

24 Q That's fair.

25 I'm assuming in Google Hangouts you never had an

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1 opportunity to try to turn history on or off?

2 A Frankly, I've never thought about whether that
3 option was even available or not, so I don't know, but I
4 don't recall ever thinking about it.

5 Q So I'm going to hand you -- and I apologize for
6 the reach I'll be doing all day, Deposition Exhibit 1.

7 And I'll put it on the Elmo.

8 Now, ignoring this squiggly little river looking
9 line, do you see in Deposition Exhibit Number 1 that there
10 are two stopwatches?

11 MR. MCCALLUM: Objection. If I could just
12 get a representation from counsel describing the
13 document, because I know that it doesn't have a Bates
14 number printed on it, so it does not appear to be a
15 document produced in the litigation.

16 MR. COLLIER: This is not a document produced
17 in the litigation. I'll ask some questions, and then
18 I'm going to tie it to produced documents.

19 MR. MCCALLUM: Okay. Are you going to give a
20 rough indication of what it is that document represents
21 given that it hasn't been produced?

22 MR. COLLIER: Once I ask the witness if he
23 has any understanding of this.

24 BY MR. COLLIER:

25 Q So, sir, ignoring, again, the squiggle line which

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1 is an artifact of copying, do you see two stopwatches there,
2 or two icons that look like stopwatches, or clocks, or
3 alarms?

4 A I do now that you characterize them. At first I
5 had it flipped at a 90-degree angle, and I was wondering
6 what those are. But, yeah, now that I see, when you
7 oriented it on the screen, I can see that these may look
8 like stopwatches, yes.

9 Q Or clocks or alarms, right?

10 A Yeah. I mean, same answer. I mean, I --

11 Q Okay.

12 A I have not seen those before, but I have no reason
13 to disagree with your characterization here.

14 Q Well, you've anticipated my next question.

15 Do you have any understanding as to what these
16 clock or alarm icons have to do with turning history on or
17 off?

18 MR. MCCALLUM: Object to the form.

19 THE WITNESS: I do not. That's the first
20 time I'm seeing those.

21 BY MR. COLLIER:

22 Q Okay. So if I represent to you -- and we're going
23 to show a full page, including a produced page that your
24 counsel will want to see, but if I represent to you that
25 these icons turn history on and off, which icon do you

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1 believe would turn history on for Google Chats?

2 MR. MCCALLUM: Object to the form.

3 THE WITNESS: It really depends on what
4 potentially the default setting is.

5 I would be completely speculating and
6 guessing, so I don't know, but if presumably the
7 default history is off, then the -- I guess on the
8 screen, the top one, the one without being crossed,
9 would turn it on would be my guess, but I'm
10 speculating, I don't actually know.

11 BY MR. COLLIER:

12 Q No, I understand. We're going to go through it
13 and answer this question, but I just want to make sure.

14 This one is -- the top one -- without the bar
15 going through it is the one that would turn history on, that
16 would be your speculation?

17 MR. MCCALLUM: Same objection.

18 You haven't shown -- made any representations
19 as to what the document is.

20 THE WITNESS: That -- that would be my,
21 again, guess.

22 If the default was off, then presumably
23 clicking on or activating that particular button, I
24 would guess it turns the history on, but I'm not sure,
25 again.

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1 BY MR. COLLIER:

2 Q That's fair.

3 And then again just to round out the -- to round
4 out the equation. If the clock without the line is history
5 on, the clock with the no line would be history off, right?

6 MR. MCCALLUM: Same objection.

7 Showing the witness a portion of the document
8 without context.

9 THE WITNESS: It -- it could be. So
10 certainly I'd be -- I would think, at least my --
11 probably a stronger guess would be that both mean
12 something different.

13 Meaning that if one is on then the other must
14 be off, but I'm not so certain about which one is on
15 and which one is off, as I sit here.

16 BY MR. COLLIER:

17 Q Okay. What does that line going through the clock
18 indicate to you, if anything?

19 MR. MCCALLUM: Same objection.

20 THE WITNESS: Well, I can only read this line
21 relative to the picture without the line.

22 MR. COLLIER: Uh-huh.

23 THE WITNESS: Meaning that it's a state
24 that's opposite to the other state. That's how I would
25 read it.

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1 BY MR. COLLIER:

2 Q And opposite, usually that line means no or off,
3 right?

4 MR. MCCALLUM: Same objection.

5 THE WITNESS: Relative to the default,
6 depending on what the default is.

7 BY MR. COLLIER:

8 Q Okay. Let's assume -- assume that history is
9 defaulted off, as it was for years at Google, right?

10 A That's -- yeah, I mean, I understand your
11 question. Okay.

12 Q Okay. Assuming that history was defaulted off,
13 which switch would you hit with no other information to turn
14 history on?

15 MR. MCCALLUM: Same objection.

16 THE WITNESS: So, yeah. So in your -- what
17 you ask me to assume in a kind of hypothetical, that I
18 envision would be I'm sitting in front of a tool and
19 there's a history -- and history's defaulting to off,
20 my guess would be that the line that the -- I guess the
21 picture that's below, the one that's with a crossed
22 line would be the one that's activated, maybe
23 highlighted in some way, and then in order to turn the
24 history on, I would probably try to click on the -- the
25 logo above, the one that you've written history on next

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1 to. That's -- that would be my guess as I sit here for
2 that situation.

3 MR. COLLIER: That's fair enough.

4 I'm now going to show you and hand you
5 Exhibit 2.

6 MR. MCCALLUM: This looks to be another
7 unproduced document; is that correct?

8 MR. COLLIER: It is.

9 And, Madam Court Reporter, I have set aside
10 your exhibit stickers. So I'll just write 2 on here
11 and we'll collect them later.

12 BY MR. COLLIER:

13 Q Now, have you ever seen a setting that has the
14 clocks as represented in Exhibit 1, but with the words shown
15 in Exhibit 2?

16 MR. MCCALLUM: Objection. Showing the
17 witness a portion of a document without context.

18 THE WITNESS: Just as with the previous
19 document, I do not recall seeing a portion of that --
20 it doesn't come to mind.

21 BY MR. COLLIER:

22 Q Okay. Now I'm going to hand you Exhibit 3.

23 Exhibit 3, for the record, is -- sorry, I'm trying
24 to get the Elmo working, Bates Number GOOG-AT-MDL-B-4290164.

25 In preparing for your testimony today, did you

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1 review this produced document showing how history on and
2 history off was done in G Suite?

3 MR. MCCALLUM: Object. And caution the
4 witness not to disclose the content of any
5 communications with counsel.

6 THE WITNESS: If I have reviewed this
7 document, it would have been before I signed my expert
8 report, so before, I guess, November 27th.

9 I do not have a specific recollection of
10 reviewing the document, so if that Bates stamp number
11 is not on my Materials Considered List, I have not seen
12 it before.

13 MR. COLLIER: Fair.

14 THE WITNESS: But even if I've seen it, I do
15 not have a recollection of it.

16 MR. COLLIER: Fair enough.

17 BY MR. COLLIER:

18 Q Can you agree with me that, as we look at Exhibit
19 3, it is possible that an employee could get confused by the
20 history on and history off logos and words, right?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: I mean, I'm not sure about the
23 employees. If you ask me, I mean, it's -- it actually
24 appears to be spelled out, so I'm not sure.

25 I mean --

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1 BY MR. COLLIER:

2 Q Okay. Fair enough.

3 Have you seen, as you've gone through the
4 documents in this case, various Google employees saying that
5 the history on and history off setting is confusing to them?

6 A I do not recall specifically seeing such documents
7 in that contents.

8 If anything comes to mind, I'll mention, but I
9 thought about it, I cannot recall those instances.

10 Q Well, let me see if I can help you. I'm going to
11 hand you Exhibit 4.

12 Exhibit 4 is GOOG-AT-MDL-B-4290028 to 29. Take
13 your time and look at that, and then I'll ask you about a
14 few statements.

15 A Okay. I've reviewed Exhibit 4.

16 Q Would you agree with me that this appears to be a
17 chat pulled into an e-mail by a Google employee?

18 A So I don't know for a fact about the document
19 you've given to me. What I do know that it looks more to me
20 like a production out of the Google Vault system, which when
21 conversations are produced out of the Google Vault system
22 they do tend to appear in a way that's similar to what an
23 e-mail would look like, but that's just the way that Google
24 preserves conversations, that's my understanding.

25 Q Fair enough. Let me ask a better question.

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1 You can agree with me that this appears to
2 represent a Google Chat conversation in 2018, February of
3 2018?

4 A That's fair. So the conversation itself is from
5 2018, and it was maintained for a period of what looks like
6 here 18 months through November 20 of 2020, which means it
7 must have been output into this particular format sometime
8 before that date.

9 Q Fair enough.

10 And you see at the very top, these are all Google
11 employees, right, do you see their e-mails as Google?

12 A That would be my understanding that if someone has
13 an @Google.com e-mail address, they're likely, at least at
14 the time the messages are sent, they're a Google employee.

15 I'd agree with that.

16 Q And I've done some highlighting on the copy I'm
17 showing. This is my highlighting, and I'll just say, all
18 day here, anything that's highlighted is me, the counsel.
19 Unless I say otherwise, unless I say: "This was highlighted
20 as produced," just assume any highlighting is just by me to
21 help us keep track.

22 Fair enough?

23 A Okay. Thank you.

24 Q Yeah. And if you ever have a question, ask. So
25 no one other than a lawyer would highlight so sloppily, that

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1 may be the giveaway.

2 All right. Do you see in the very beginning,
3 someone is asking in 2018 what state is the history toggle
4 here?

5 A I do see that highlight, yes.

6 Q Okay. And then there's a series of discussions,
7 and the result here -- and we can go through it line by
8 line, is that the Google employees find the history toggle
9 to be confusing, right, or at least some of them?

10 A I mean, it does appear general topic of discussion
11 is, yeah, it seems exactly in the sense of like what is the
12 default, right, there's some messages about that.

13 But it's not clear what on and off means to these
14 Googlers based on what the default setting is, and they try
15 to, as I read through it, again, and just, you know, the
16 document says what it says, but my interpretation is that
17 they're trying to figure out which one is which based on
18 what the default state is at the time in 2018.

19 Q Well, and at least two employees, [REDACTED] and
20 [REDACTED], specifically say that they find these
21 settings to be confusing, right?

22 A That's right. That's what the -- that particular
23 user says, or Googler says. Yes, I also find this very
24 confusing. I agree with that.

25 Q Okay. So you didn't know that Googlers, Google

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1 employees, found the history on/off switch to be confusing
2 before I showed you this Exhibit 4?

3 MR. MCCALLUM: Object to the form.

4 THE WITNESS: Yeah. I have not seen this
5 Exhibit 4, or I have not seen, you know, other similar
6 documents to the extent they exist, so, I -- yeah, I
7 have not reviewed this before.

8 MR. COLLIER: Okay. Fair enough.

9 BY MR. COLLIER:

10 Q I'll now hand you what I'm marking as Exhibit 5.

11 And, for the record, that's GOOG-AT-MDL-B-4290140
12 through 0148. Take a minute and look through this.

13 A Okay.

14 Q Okay. This also appears to be a series of chats
15 among Googlers, and this time in the January 2019 time
16 period, right?

17 A That appears to be correct, yes.

18 Q Okay. You see at the beginning, the very first
19 question by a Googler, [REDACTED] is asking the group: "Is
20 there any way to prevent the," quote: Delete messages after
21 24 hours toggle from continuously getting turned back on?

22 A I see that, yes.

23 Q What do you understand about the Google system in
24 January of 2019 as to whether or not a Googler can keep the
25 delete messages after 24 hours toggle from getting

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1 continuously turned back on.

2 Is there any way?

3 A I don't have a specific understanding of the --
4 the mechanics on the back end. I do understand, and as I've
5 summarized in my expert report, the policy at the time was
6 to offer Googlers' ability to turn history on, but that that
7 setting would reset every 24 hours, so that's my general
8 understanding, but in terms of the -- to get it permanently
9 to history on, I don't -- I don't recall seeing references
10 to that.

11 Q And that tracks with what whoever [REDACTED] is saying
12 at Google, right? He turns it on, and then it -- I mean,
13 excuse me. He turns history on, if you're understanding
14 this correctly, and it keeps switching to history off, or as
15 he puts it, delete messages after 24 hours, correct?

16 MR. MCCALLUM: Object to the form.

17 THE WITNESS: Right. So I don't -- I don't
18 know obviously what [REDACTED] meant. I can see
19 the sentence, and I -- that's one interpretation that I
20 think seems fair to me.

21 BY MR. COLLIER:

22 Q And if we look at the second page of this document
23 ending in 141, after some conversations, someone at Google
24 named [REDACTED] or is that [REDACTED]? Does that look like [REDACTED] to you?

25 A It does look like [REDACTED] because all the letters are

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1 non-capitalized.

2 Q Right. He says: "Another way to look at this is
3 that the state of the conversation is the state of the last
4 message."

5 That's your understanding, right?

6 A I believe that's my understanding at the time that
7 the new message would assume the state of the previous
8 message. So the setting would be on a per message basis,
9 but it's rules-based, so it would -- the new message would
10 assume, unless actively changed, the state of the previous
11 message in the conversation.

12 Q But also -- we'll talk about this more later. If
13 in the middle of a chat someone's like: "Hey, this is very
14 important," and tries to turn history on, are you with me?

15 Well, say I'm message number five of the chat.
16 There's four messages, and then in message five, a Googler's
17 like: "Hey, everything we've talked about is very
18 important, I'm turning history on."

19 Are you with me so far?

20 A Yes.

21 Q You do understand that only message five onward
22 would be retained, correct?

23 A Well, it depends.

24 Q Depends on what?

25 A On the other -- who the other members of the

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1 particular chat group are.

2 Q Okay. Can you explain?

3 A So my understanding is depending on the timing of
4 the conversation, other members of the group, for example,
5 may be subject to a litigation hold, for example, and in
6 that case, while the individual users in the group who are
7 not part of litigation hold may be able to switch their
8 toggle on and off, the conversation itself would still be
9 preserved, because at least one member in the group was
10 subject to a litigation hold as an example.

11 So that would be one example of it depends.

12 Q So is it your understanding that when an employee,
13 we'll just say John Doe, a hypothetical Google employee, has
14 a litigation hold put on him, we'll say just for ease,
15 January 1st, 2020.

16 Are you with me?

17 A Okay. January 1st, 2020. I got it.

18 Q Does that mean if that employee sends a message on
19 January 2nd, 2020, to another Google employee not on a
20 litigation hold, that that chat is retained?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: In January 2020, that would
23 only be the case for active switching to history on.
24 So at least one member of the chat has to switch the
25 history to on per my understanding of the policy at

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1 that time.

2 BY MR. COLLIER:

3 Q So prior to 2023, do we agree that for a message
4 to be retained, history had to be on and one individual had
5 to be subject to a litigation hold in that chat?

6 A I don't believe the second requirement is
7 necessary.

8 So the -- the -- even for individuals who are not
9 on litigation hold, per policy, some messages at that time
10 with history on would still have been kept, would have been
11 sent to Google Vault and kept for either 30 days or 18
12 months at the time.

13 Q And which ones were kept for 30 days?

14 A So 30 day ones would typically be the direct
15 messages. So the ones that are just between, you know, two
16 individuals.

17 The 18 months would be, you know, for group
18 messages. There's some exceptions, but the policy I believe
19 is pretty detailed on that point.

20 Q Okay. Going back to our Exhibit 5. So we talked
21 a little bit about the state of the conversation in the last
22 message.

23 And do you see what ■ -- ■ response to
24 learning this information in 2019 is?

25 A Well, the sentence you pointed me to says that's

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1 completely not obvious.

2 Q And then he goes on to say what?

3 A The next message says: "That will explain why it
4 has seemed broken to me on so many occasions."

5 Q So was it -- is it fair to say that Exhibit 5
6 shows us more -- at least one other Googler who finds this
7 history on and off and retention confusing?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: I mean, it certainly is another
10 example among the chat -- the preserved chats with
11 Googlers discussing it and clarifying the situation.

12 BY MR. COLLIER:

13 Q Well, let's turn to the next page. Page 3, or
14 Bates Number 142.

15 A I'm there.

16 Q Now we have a different Googler, [REDACTED] and do
17 you see where he says -- and he says it twice once he
18 updated, do you understand that to be he amended a prior
19 message?

20 A Yes, that's my understanding.

21 Q In his updated message, but it was actually the
22 original, that having a preference switch reset without the
23 user touching it is an, all caps, extremely confusing
24 decision.

25 A I see that, yes.

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1 Q Do you have any doubt that [REDACTED] at Google
2 found the history on off switch resetting to be extremely
3 confusing?

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: Yeah. I do see that this
6 particular Googler, his conversation maybe goes on a
7 page and one -- or two messages over to next pages,
8 particularly concerned about his private chats, or
9 personal chats, as he calls it, but I would agree that
10 he seems --

11 BY MR. COLLIER:

12 Q Confused, right?

13 A At least, yeah, wants to clarify his confusion. I
14 agree with that.

15 Q Let's go to the next page. Bates Number 143.

16 [REDACTED] at Google also -- agrees that this is
17 confusing, right?

18 A That's what [REDACTED] says, yes.

19 Q And then [REDACTED] jumps in and says: "He also
20 doesn't" -- well, he or she, I don't know -- "also doesn't
21 understand how it actually works."

22 Do you see that?

23 A I see that sentence, yes.

24 Q And then he says: "One interpretation" -- can you
25 read that sentence to me?

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1 A The sentence says: "One interpretation is that
2 when you turn the switch on, all messages, you can see are
3 saved -- are now saved."

4 Q Is that interpretation accurate as you understand
5 Google Chats?

6 A Well, it would depend on the setting of the
7 previous, that was attached to the previous messages. So it
8 could be true, but it also does not have to be true.

9 Q That's my understanding also of -- that, if
10 anything, this interpretation's incomplete because you need
11 to know more, right?

12 A That's fair.

13 Q And then if we look at the next page, the fifth
14 page, but Bates Number 144. I didn't highlight it, but I
15 will.

16 Pbense says: "Another interpretation is that only
17 messages you send," quote: While that switch is on actually
18 gets saved.

19 Do you see that?

20 A I do.

21 Q Is that interpretation correct?

22 A I believe that interpretation is more complete.
23 I'm trying to think of an exception.

24 I don't believe at the time or ever there was an
25 ability to go back and change the setting on a previous

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1 message, so in that sense, I mean, I'm not an expert in the
2 area, but as I sit here, based on my review of documents,
3 that seems to be pretty close to -- to correct, if not
4 correct.

5 Q And then [REDACTED] if that interpretation is the
6 correct one, he says: "That makes it even more useless."
7 Right?

8 A That's what he says, yes.

9 Q And why is that interpretation of how Google Chats
10 retains or doesn't retain messages feel useless to [REDACTED]

11 MR. MCCALLUM: Object to the form.

12 MR. COLLIER: If he says -- I might have put
13 a star by it to help you.

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: I see the sentence you put a --

16 MR. COLLIER: I withdraw my star. I withdraw
17 my star comment.

18 BY MR. COLLIER:

19 Q Star or no star, can you see where [REDACTED] explains
20 why the chat retention policy is useless?

21 MR. MCCALLUM: Same objection.

22 THE WITNESS: I -- I -- I see the sentence
23 and I -- my interpretation of the sentence, now that
24 I'm seeing it, it would be consistent with I guess my
25 previous answer, which is that here [REDACTED] appears to

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1 say that -- I guess, I don't know, maybe -- you'd have
2 to ask him, but to me personally it implies that he
3 realizes he cannot change the previous -- whatever he
4 typed in previously, he cannot change the setting on
5 that once that message has been sent.

6 That's my interpretation of it, but I --

7 BY MR. COLLIER:

8 Q So this might come back to our hypothetical, where
9 let's say [REDACTED], [REDACTED] is that what you call him, or
10 her?

11 A Yeah.

12 Q We'll just call him [REDACTED] and we'll call him
13 "him," and if it's her, someone can correct us.

14 But one thing that could happen here for [REDACTED] is
15 he's saying he doesn't realize until after the conversation,
16 so this might be the scenario we discussed earlier, where
17 four messages are sent with the default history off, right,
18 and then on message five, pbense, or someone else, realizes:
19 "Hey, this is important stuff."

20 Correct?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: I mean, I understand your
23 hypothetical. I just want to make sure that because
24 the [REDACTED] here seems to be particularly worried about
25 the history on setting, rather than the history off,

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1 right? So it's kind of like the flip.

2 BY MR. COLLIER:

3 Q Okay. Let's take it history on.

4 Tell me what [REDACTED] is worried about from your
5 read in a, say, a multi-text -- or excuse me, a multi-chat
6 scenario?

7 MR. MCCALLUM: Object to the form.

8 Calls for speculation.

9 THE WITNESS: Right. So from the messages
10 we've -- you've highlighted, it appears that [REDACTED] is
11 concerned about sometimes typing in into the chat,
12 sending the message, and then realizing he would have
13 preferred the history to have been off, but now he has
14 no choice because he knows this message will be
15 retained. There's no going back.

16 That's, again, I don't know exact -- I mean,
17 you know, I'm not [REDACTED] so I -- but that would be --
18 at least the three highlighted messages, that seems
19 what [REDACTED] is talking about.

20 But if [REDACTED] says something else, I have no
21 reason to agree or disagree.

22 BY MR. COLLIER:

23 Q Sure. But just looking at the sentence [REDACTED]
24 written, it wasn't that he's concerned that something should
25 be off when it's on. He says: "Oftentimes, I don't realize

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1 until after the fact the conversation needs to be retained."

2 Right?

3 A I see that part now, yes.

4 Q So that would be a signal that at least [REDACTED]
5 believes he has sent chats that he wishes he could retain
6 but he didn't at the time know the importance of the chats,
7 right?

8 MR. MCCALLUM: Object to the form.

9 Calls for speculation.

10 THE WITNESS: Right. I mean, I think that
11 would be my interpretation as well of that particular
12 statement.

13 BY MR. COLLIER:

14 Q Okay. And then finally on this Exhibit 5, at the
15 bottom of the page -- I'm sorry, I'm trying to line up the
16 Elmo to help you.

17 At the bottom of the page, Bates Number 146, and I
18 just have to do that because there's an unfortunate page
19 break. There's a new individual, at least new to us,
20 [REDACTED].

21 Do you see he or she sent a message?

22 A I do, yes.

23 Q And then if you go to the next page -- well, first
24 of all, before I turn the page, do you agree that the
25 message we're about to look at on the next page is from [REDACTED]

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1 A Yes. I would agree.

2 Q Sorry. It's just the way the page is broke.

3 And then he sends a message, and then he sends an
4 updated message. In the updated message, do you see where
5 he says: "As it is on mobile, it's hard to know if the icon
6 is history is enabled or deletion is enabled. I just know
7 there's a stopwatch that's enabled."

8 Do you see that?

9 A I do.

10 Q Does that tend to indicate to you that the
11 stopwatch icon might be confusing?

12 MR. MCCALLUM: Object to the form.

13 BY MR. COLLIER:

14 Q At least as to the gentleman who wrote this. I
15 won't ask you as to everyone.

16 MR. MCCALLUM: Same objection.

17 THE WITNESS: I mean, it's -- I mean, just to
18 repeat. It's the first time I'm seeing this document.

19 My impression of this particular message, I
20 mean, it's actually -- it's a clever observation on a
21 UX front that making the windows dark, but, yeah, this
22 whole -- this whole chat we're going through, there's
23 certainly individuals like [REDACTED] at Google who are
24 raising their opinions about the toggle and the history
25 on/off, so it seems like a specialized chat on the

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1 topic, and there's certainly individuals who are very,
2 you know, technology knowledgeable, so they -- they --
3 they can point to certain aspects of the toggle on and
4 off, and at least it appears they're speculating as to
5 what's behind it, but that's all I can tell you.

6 You know, I haven't studied the document or,
7 frankly, I don't really have the expertise to comment
8 on the specifics here of -- definitely not on the state
9 of mind of the individuals, whether they're actually
10 confused or not.

11 BY MR. COLLIER:

12 Q Well, that may save me a bunch of questions.

13 Is it -- given the scope of your opinion in this
14 case, is it relevant whether or not Google employees were
15 confused as to how to retain and preserve chats that might
16 be relevant to a litigation?

17 MR. MCCALLUM: Object to the form.

18 THE WITNESS: Not specifically in the context
19 that we have been discussing.

20 I -- I cannot see its relevance to the
21 opinions that I've offered in this case.

22 BY MR. COLLIER:

23 Q And that's fair enough, I'm not necessarily
24 implying that it should be. I just -- I can do, I promise
25 you, many more pages of this, but if you're going to tell me

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1 it's not relevant to your opinion whether Google employees
2 were confused because you opine on other things, that's
3 fine, but I don't want to misstate it.

4 A Yeah, I believe that's fair. I don't have an
5 opinion on the confusion in this case.

6 Q Have you ever heard the phrase: "What happens in
7 Vegas"?

8 A I've heard variations of that phrase, yes.

9 Q How does the phrase end: "What happens in Vegas"?

10 A Stays in Vegas.

11 Q Yeah. That's at least the one I've always heard.
12 What do you understand that phrase to kind of
13 mean?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: I've heard various references
16 to what it may mean. So spanning from, you know, sort
17 of the -- on the one hand like the secret aspect of
18 what happens here cannot leave this room, to things
19 like, you know, what is allowed to happen here, we're
20 only going to do here but we won't do anywhere else,
21 but it doesn't necessarily -- it's not a secret, per
22 se. So it -- I've heard it used in a spectrum of sort
23 of explanations, but I'm, yeah, certainly not an expert
24 on, you know, defining the idiomatic and other
25 expressions.

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1 BY MR. COLLIER:

2 Q Have you heard in the context of the chats
3 retention in this case any references to Vegas?

4 A Not in the context of what stays -- what happens
5 in Vegas. I believe I've seen a -- during the chats I have
6 reviewed, so the ones that would be part of my Materials
7 Considered List, I may have seen references to a conference
8 that happens in Vegas, some tech-related conference, but
9 that's what I recall right now, but I don't recall the
10 phrase being used.

11 MR. COLLIER: Okay. Well, we've been going
12 almost an hour. You want to take a break and I'll
13 shift topics?

14 THE WITNESS: Yes, thank you.

15 MR. COLLIER: And I didn't say it before, but
16 obviously -- and we'll do this bit, but, you know, any
17 time you need a break, let me know.

18 THE WITNESS: Thank you.

19 THE VIDEOGRAPHER: The time right now is
20 10:03 a.m. We are off the record.

21 (Recess taken at 10:03 a.m.)

22 THE VIDEOGRAPHER: The time right now is
23 10:21 a.m. We are back on the record.

24 BY MR. COLLIER:

25 Q Mr. Malkiewicz, can you go back to Exhibit 5? And

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1 I'm showing it on the screen.

2 And we had, I think, ended our discussion, or at
3 least stopped on Bates page 147. I just want to talk to you
4 about a few more concepts in this chat.

5 If you can turn to 147, I believe -- yeah. This
6 is where we had talked about the gentleman, he had another
7 thing of confusion, but do you remember discussing "I just
8 know there's a stopwatch that's enabled."

9 Do you remember that?

10 A Yes. And I see that now as well.

11 Q Okay. And then, after that, we have [REDACTED] come
12 back in and say: "TIL, I should stop attempting to keep
13 track of anything useful in 1:1 Chat messages."

14 Do you see that?

15 A I see that sentence, yeah.

16 Q What is TIL?

17 A I'm actually not familiar with that particular
18 acronym.

19 Q Have you ever heard of TIL as an acronym for
20 "today I learned"?

21 A I actually have not.

22 Q Okay. Would it surprise you if TIL was used by
23 people who don't have gray in their hair and beard like you
24 and I as, "today I learned"?

25 MR. MCCALLUM: Object to the form.

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1 THE WITNESS: No. It would not surprise me.

2 BY MR. COLLIER:

3 Q So what does 1:1 Chat messages mean to you?

4 A I would I guess speculate or guess that it's a
5 one-on-one.

6 Q I think you're right. I think that's a logical.

7 Do you think it is a good thing or a bad thing for
8 Google's retention when their employees have decided, based
9 on the confusion of the settings, that they should stop
10 attempting to keep track of anything useful in their
11 one-on-one Chat messages?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: I mean, in the context of this
14 particular message, I just cannot tell you what [REDACTED]
15 actually means.

16 If that's a set of, you know, an ironic or
17 sarcastic comment or not, you'd have to -- I'm not sure
18 if [REDACTED] was deposed in this case about this, but I
19 think as a general statement, I don't see an issue, but
20 in the context of what [REDACTED] actually means here, I
21 just really could not tell you what that particular
22 individual wanted to convey through that message.

23 BY MR. COLLIER:

24 Q If the goal of Google in January of 2019 was to
25 retain anything useful in the one-on-one Chat messages,

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1 would [REDACTED] statement that he should stop attempting to
2 keep track of those be helpful to having chats retained or
3 harmful?

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: In the context of what we're
6 here trying to guess what [REDACTED] meant, it just really
7 depends on what the outcome is of what [REDACTED] you
8 know, is trying to say here, right.

9 That's -- it just really depends. I mean,
10 I'd be really guessing as to how it might impact. I
11 think what you describe in your question as
12 preservation.

13 BY MR. COLLIER:

14 Q So I just want to be clear.

15 It is irrelevant to your opinions about the number
16 of documents, say, retained in 2019, whether or not Google
17 employees decided to stop attempting to keep track of
18 anything useful in one-on-one Chat messages; is that fair?

19 MR. MCCALLUM: Object to the form.

20 THE WITNESS: I mean, if we're talking still
21 in the context of this particular conversation that
22 we've been discussing, Exhibit 5, then I would not
23 necessarily agree with that statement.

24 BY MR. COLLIER:

25 Q So it is relevant to your opinions as to the

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1 number of documents retained in 2019, whether Google
2 employees decided to stop attempting to keep track of
3 anything useful in one-on-one Chat messages?

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: Well, it is -- it is relevant
6 to the -- to the information set that I have reviewed
7 in the context of my critiques that I offer in this
8 case, which are that we don't know. Meaning that like
9 I have seen no evidence to actually analyze, for
10 example, [REDACTED] history, to see if, you know, [REDACTED]
11 here, if we really do interpret it, as we suggested
12 that [REDACTED] is frustrated, and we interpret he's
13 messaged in one way, you know, I don't know if [REDACTED]
14 moved on to e-mails to preserve his substance
15 communications and if those have been produced.

16 My point is that we just don't know, so
17 that's -- in that sense, it's part of my analysis, but
18 it's not part of the opinions, per se, I didn't analyze
19 individual records of individual Googlers who may or
20 may not have been subject to litigation holds.

21 So I don't -- in that sense, I don't know. I
22 don't have an opinion, and I certainly cannot read -- I
23 can read the sentence, but I cannot read the intent and
24 the outcome of what -- what the outcome for [REDACTED] was
25 of this message.

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1 BY MR. COLLIER:

2 Q Okay. Turn to the next page, Bates Number 148.

3 The fifth chat conversation down is now a new
4 person.

5 He or she, [REDACTED] that's the best I got for
6 pronunciation.

7 Do you see where [REDACTED] said: "Completely
8 agree. This experience is confusing," parens, "I messed up
9 several times in the beginning."

10 Do you see that?

11 MR. MCCALLUM: Objection. I think you
12 misread the Chat message. If you want to try it again,
13 Counsel.

14 MR. COLLIER: I don't want to misread it, so
15 let me try it again.

16 BY MR. COLLIER:

17 Q Do you see where Mr. [REDACTED] says: "Completely
18 agree that this experience is confusing," open parens, "it
19 messed me up several times in the beginning," closed parens,
20 period.

21 Do you see that?

22 A I do, yes.

23 Q Do you know who he or she is, [REDACTED]

24 A Not other than from the context of these messages,
25 so maybe not just this one but the --

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1 Q The next one?

2 A The next one that --

3 Q Yeah.

4 A -- I get a rough sense of who he is.

5 Q The rough sense you've got is based on the fact
6 his next message says: [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 Do you see that?

10 A I do.

11 Q And you know what UX is, right?

12 A In my understanding, it typically refers to user
13 experience.

14 Q Yes. And so it would seem to you that whoever
15 [REDACTED] is, is someone who's [REDACTED]

16 [REDACTED]

17 MR. MCCALLUM: Object to the form.

18 THE WITNESS: Well, it appears that he's

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25

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1 BY MR. COLLIER:

2 Q [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: It really depends on how it's
9 implemented. If the back end is flexible enough to
10 allow for the UX to force that change, that would be a
11 UX only change.

12 I just -- I have not reviewed any code
13 related to the chat tool in this case, so I don't know
14 what the opportunity was here for Mr. or Ms. [REDACTED]

15 BY MR. COLLIER:

16 Q Okay. And when, in context, Mr. [REDACTED] says:

17 [REDACTED] it's
18 referring to the history on and history off setting, right?

19 MR. MCCALLUM: Object to the form.

20 THE WITNESS: I mean, I don't know for a
21 fact, but in the context of the conversations we've
22 reviewed, I could see that specifically focused on the
23 toggle on/off button.

24 BY MR. COLLIER:

25 Q So when did Google, if you know, actually make

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1 sure that the history on history off setting that a user
2 selects would stick?

3 MR. MCCALLUM: Object to the form.

4 THE WITNESS: I -- I don't believe I know as
5 I sit here.

6 BY MR. COLLIER:

7 Q Can you give me your understanding of just the
8 overall framework of how a Google Chat would make its way to
9 the Vault, and then ultimately to Google's counsel to be
10 produced, if it was captured.

11 Can you kind of walk me through your understanding
12 of that?

13 A Well, it would be very nontechnical understanding,
14 because I'm not a technical expert, and it, you know, I
15 stand behind a description or the characterization that I've
16 put into the background section of my expert report in this
17 case.

18 So if that's what you're interested, I'm happy to
19 recite that.

20 Q Well, you say you're not a technical expert. Can
21 you help me with what you mean by that?

22 A I don't have a technical -- technological
23 understanding of how exactly things move. I have a
24 understanding of the interpretation for the purposes of the
25 context in which I perform my analysis.

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1 You know, like an example of which is what we
2 discussed when you first asked me about, you know, the
3 documents you put in front of me being e-mails versus I have
4 an understanding these are not actually e-mails but the way
5 that the Vault operates, so this is a level at which I feel,
6 you know, comfortable discussing the -- the -- sort of the
7 technical aspects, so to speak, of Google's, you know,
8 electronic communication preservation systems.

9 Q So does that mean you did -- you have not reviewed
10 the code for Google Chats?

11 A That's certainly correct. I have not reviewed any
12 code in this case for Google Chats or any technology
13 products.

14 Q Okay. Do you know what programming language
15 Google Chats is written in?

16 A I may have known at some point, but I don't
17 actually recall as I sit here.

18 Q Do you -- I think I understand this answer to this
19 question, but I have to ask.

20 Did you review any code in this case for the
21 Google Vault?

22 A I did not.

23 Q Do you have any understanding as to what
24 programming language Google Vault is written in?

25 A I do not know.

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1 Q Do you know how to program a Go, G-o?

2 A I'm not an expert, but I've used it in the past
3 for work.

4 Q As a -- as a user or a programmer? I'm sorry.

5 A As a consultant. In my practice, I often code in
6 what I'll call the level five languages, so including in
7 statistical software, such as SAS data. I also use and
8 teach Python.

9 I occasionally reference Go as well. It's a very,
10 you know, straightforward programming language, similar to,
11 in many respects, UC, but I'm not an expert programmer. I
12 never offer myself as such. It's more of an inputting into
13 the work that I do professionally.

14 Q Okay. By the way, you saw that Jacob Hochstetler
15 wrote some code to do system analysis. I promise you we're
16 going to talk about his analysis and your thoughts on that.

17 But simply focused on the code Jacob Hochstetler
18 wrote to perform his analysis, did you review and analyze
19 that code?

20 A I have, yes.

21 Q And did you -- you didn't put in your expert
22 report that there were any problems with his programming
23 language, as opposed to -- I understand you have problems
24 with his inputs and his conclusions; is that fair?

25 A I mean, that's fair with just one caveat about the

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1 description of the environment setup for one of his codes,
2 because it's a little more complex in terms of my own
3 attempts at running his code on the datasets that I've been
4 provided, but in terms of my identification of any issues
5 with either of his two codes, I have no -- no critiques of
6 those.

7 Q Okay. So I'd like to make sure I understand -- we
8 can discuss a hypothetical.

9 Now, I want you to assume with me, and for your
10 counsel's benefit, this is not a produced document, this is
11 just something we wrote up as a demonstrative. I will mark
12 it as Exhibit 6.

13 I want you to assume with me a chat between
14 persons A and B, pre-February of 2023.

15 You want to just say January of 2023; does that
16 work?

17 A Okay.

18 Q All right. And history is off for persons A and B
19 who are chatting.

20 Are you with me?

21 A Yes.

22 Q And person A says -- and I'll put A by this: "You
23 know we have a monopoly in ad tech."

24 This is just a hypothetical, and person B, with
25 history off, both of them have history off, says: "Yes, we

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1 do."

2 And then person A comes back and turns history on,
3 and says: "We have worked hard on our ad tech products.

4 And person B says: "Yes, we are the best."

5 In that hypothetical, how many chats would be
6 retained for the vault?

7 MR. MCCALLUM: Object to the form.

8 BY MR. COLLIER:

9 Q There's four chat lines. How many would be
10 retained for the vault?

11 MR. MCCALLUM: Object to the form.

12 THE WITNESS: So assuming that on the page
13 you prepared we see four chats, if that's, you know, my
14 correct interpretation of your drawing here, if these
15 are any two Google users with the history off on the
16 top, history on at the bottom, in my current
17 understanding.

18 Again, this is nontechnical expert, is that
19 the two messages on top would not be sent to the Vault,
20 they would be sort of kept within the chat tool itself
21 for 24 hours.

22 MR. COLLIER: Okay.

23 THE WITNESS: And then the two other messages
24 would be sent to the Vault for preservation as of the
25 time that you've indicated in January 2023.

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1 BY MR. COLLIER:

2 Q So I wrote your initials, that you believe the
3 first one wouldn't go to the Vault, and then the second one,
4 based on this hypothetical, would, correct?

5 MR. MCCALLUM: Object to the form.

6 THE WITNESS: That's my general
7 understanding. I don't know if there would be any
8 exception here.

9 But that, you know, to the extent if my
10 understanding here is consistent also with what I wrote
11 in my report, I stand behind it.

12 MR. COLLIER: Sure.

13 THE WITNESS: That's also not particularly a
14 subject of my opinions. It's more of a background
15 understanding of how it works.

16 BY MR. COLLIER:

17 Q Fair enough.

18 Now, let's, in this hypothetical -- you're not an
19 expert in antitrust in this case, right? You're not
20 offering any antitrust expert opinions are you?

21 A I'm certainly not, no.

22 Q Okay. But you do know antitrust.

23 You've spoken on antitrust before, right?

24 A Yes. I mean, I would consider myself
25 knowledgeable and occasionally also an expert witness in

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1 antitrust matters.

2 Q Okay. So you don't even have to be an antitrust
3 expert to know in a hypothetical, if a Google employee said:
4 "You know we have a monopoly in ad tech," and the next
5 employee said: "Yes, we do." Generally speaking, that
6 would be relevant to the Court, the jury, the plaintiff, and
7 Google, as to antitrust liability in the case, right?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: That, I don't know. I'm not
10 that kind of an expert. I'm an economist, so I
11 typically don't deal with like chat histories, so I'm
12 not sure.

13 I guess it probably would depend on who the
14 individuals are and -- I don't know. I mean, I
15 certainly have not seen these kinds of messages in my
16 review.

17 BY MR. COLLIER:

18 Q You do realize as a plaintiff, Plaintiffs would
19 find it relevant that a defendant's employee admitted they
20 have a monopoly in ad tech, right, you can understand that?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: I mean, I just really don't
23 know one way or the other.

24 It may be, I'm just not an expert in -- in --
25 in documents.

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1 BY MR. COLLIER:

2 Q Well, you don't have to be an expert in documents,
3 sir, if you know antitrust law.

4 I just -- it seems to me like you're fighting a
5 hypothetical that's not a real e-mail. We can't agree that
6 it might be relevant to an antitrust trust case in federal
7 court, a Google employee saying: "We have a monopoly in ad
8 tech," and another with exclamation marks, saying: "Yes, we
9 do"?

10 MR. MCCALLUM: Object to the form.

11 Calls for speculation.

12 THE WITNESS: I apologize if I misspoke. I'm
13 certainly not an expert in antitrust law. I'm an
14 expert in antitrust economics, but certainly not law.

15 BY MR. COLLIER:

16 Q Okay. I just want -- we may play this tape for
17 the judge or the jury one day, and I just want to make sure
18 I understand that you're telling them, under oath, you don't
19 know whether a Google employee's saying: "We have a
20 monopoly in ad tech," and another's saying: "Yes, we do,"
21 with two exclamation marks. You have no idea whether that
22 could possibly be relevant to an antitrust trust?

23 MR. MACCALLUM: Object to the form.

24 Calls for speculation and a legal conclusion
25 and a hypothetical.

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1 THE WITNESS: I really don't know. I've
2 never opined on the relevance or do not have expertise
3 or --

4 MR. COLLIER: Okay.

5 THE WITNESS: It's not something that I do in
6 my professional life.

7 BY MR. COLLIER:

8 Q All right. So whether it's relevant or not in
9 your opinion, we can agree on, in this hypothetical in
10 Exhibit 6, when something -- when a couple of chats are not
11 sent to the Vault, that means they will not be preserved and
12 given to counsel in the lawsuit, right?

13 MR. MCCALLUM: Object to the form.

14 THE WITNESS: In my understanding, if they're
15 not sent to the Vault, then they would not be
16 preserved. So they would disappear after 24 hours.

17 So that -- that I know, like what are some
18 other mechanisms or what else might happen between
19 counsels, that I cannot answer.

20 BY MR. COLLIER:

21 Q Okay. And conversely, you have an understanding
22 that the chat that would -- this hypothetical chat in
23 Exhibit 6 that would go to the Vault would include just the
24 last two chats.

25 "We've worked hard on our ad tech products, and,

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1 yes, we are the best."

2 That's what would be available to counsel, right,
3 more than 24 hours later?

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: I don't know if it will be
6 available to counsel. I can tell you that from my
7 understanding of, you know, the technical aspects of it
8 that it will be preserved in Google system, so at least
9 someone at Google, who's a -- who keeps track of the
10 Vault would have access to it for, you know, a
11 specified period of time, but what's available to
12 counsel, I cannot speak to that.

13 MR. COLLIER: Well, that's fair. So let me
14 go back and ask about the first part.

15 BY MR. COLLIER:

16 Q These first two messages in Exhibit 6, just as a
17 technical matter, would not be available to the Google
18 Vault; is that fair, under this hypothetical?

19 A Under your hypothetical, as of January 2023,
20 that's my understanding, yes.

21 Q Okay. All right.

22 I'm going to mark another demonstrative as Exhibit
23 7.

24 Okay. This hypothetical, I want you to assume
25 it's pre-February 2023. So we'll say January 2023, okay?

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1 A Okay.

2 Q Same thing. A and B with four texts, and I just
3 want to make sure nothing about the content of the text
4 changes any of your answers.

5 If history off is when Google Employee A says:
6 "You know we have a monopoly in ad tech." In history --
7 excuse me, employee B says: "Yes." Exclamation points.
8 "We do."

9 Then Employee A says: "When's the birthday
10 party?" Or something, you know, grocery list, anything
11 non-substantive.

12 And the answer is: "It's at noon."

13 But these are the parts where history was turned
14 on, we would have this not in the Vault, right, these top
15 two would not be in the Vault, but the bottom two messages
16 would, you know: "When's the birthday party?"

17 "It's at noon."

18 Would have been retained and put in the Vault.
19 Whatever happens to it after the Vault I understand is a
20 different story, but they would be retained and in the
21 Vault, right?

22 MR. MCCALLUM: And just to clarify. This is
23 another hypothetical created by counsel, right?

24 MR. COLLIER: As evidenced by the handwriting
25 and manila folder.

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1 MR. MCCALLUM: Object to the form.

2 THE WITNESS: So, I mean, we'd have to -- so
3 I'd have to assume, you know, everything else stays
4 constant about the previous hypothetical.

5 MR. COLLIER: Okay.

6 THE WITNESS: The chats we've reviewed so far
7 seem to suggest that, you know, turning history on for
8 personal, I mean, the Googlers, in fact, really wanted
9 to have history off for personal messaging.

10 MR. COLLIER: Okay.

11 THE WITNESS: So it's -- you know, I have to
12 navigate the hypothetical versus also what we know
13 about the case, but in terms of just keeping in lanes
14 of your previous hypothetical, and the only adjustment
15 that we're making is replacing the final two of the
16 four messages, then I don't -- I don't believe that I
17 have any other information to think that those would
18 not be preserved in the same exact way as in the
19 previous hypothetical.

20 BY MR. COLLIER:

21 Q So the birthday party and the noon messages would
22 be sent to the Vault, and they'd be preserved under this
23 hypothetical, right?

24 A That's my understanding. With all these caveats,
25 yes.

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1 Q And then that preserved chat would no longer,
2 would not have the monopoly in ad tech text, correct?

3 MR. MCCALLUM: Object to the form.

4 THE WITNESS: Bearing some other
5 circumstance, if the history was off, those messages
6 would not be sent to Vault, they would disappear after
7 a 24-hour period.

8 BY MR. COLLIER:

9 Q And then -- so it would be possible then for
10 Google to collect portions of chats, depending on all
11 pre-2023, February 2023, I should say, it's possible, if not
12 likely, that when Google preserves chats, some portions of
13 the chat may not be preserved, depending on the history
14 setting that was applicable for those chats, but then it may
15 come back on and it may go back off again if someone
16 switches it back off, right?

17 MR. MCCALLUM: Object to the form.

18 THE WITNESS: As a matter of technical
19 possibility, that's certainly possible, but I do point
20 in my report, as well as Professor Hochstetler points
21 to it, too, that it's a relatively rare occurrence.

22 So, for example, for the five individuals,
23 Professor Hochstetler and I actually analyzed, that
24 certainly was not a situation where the toggle was
25 turned on and off during the time period even before

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1 February 2023.

2 So I think it's technically possible, but
3 probably unlikely I would say, based on the documents
4 and data that both Professor Hochstetler and I have
5 reviewed.

6 BY MR. COLLIER:

7 Q Yeah. So let's take it in two pieces.

8 After February of 2023, the default setting would
9 be history off for Google employees, correct?

10 MR. MCCALLUM: Object to the form.

11 BY MR. COLLIER:

12 Q Oh, excuse me. The default setting would be on.
13 No wonder you looked confused. Let me start all over.

14 I should have done the earlier in time one first,
15 but now I'm -- now I'm -- now I'm -- now I'm pot committed.

16 Do you know what pot committed means?

17 A I can infer.

18 Q It's a poker term. Okay. Here we go.

19 Can we agree that after February of 2023, the
20 default setting for chats would be history on for Google
21 employees, correct?

22 MR. MCCALLUM: Object to the form.

23 THE WITNESS: That is my understanding. That
24 the policy was implemented across all the Googlers,
25 yes.

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1 BY MR. COLLIER:

2 Q And the data you've analyzed would show you that
3 rarely does a Google employee go switch that default
4 setting, so your assumption, as evidenced by the data, would
5 be that history is going to be on for the vast majority of
6 Google employee's chats after February of 2023, because of
7 the default, right?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: Not -- not necessarily, I would
10 not have as broad of a conclusion.

11 So my conclusion is more limited to the -- to
12 the data for the actual individuals that I have access
13 to, and Professor Hochstetler has analyzed as well, to
14 look whatever there is actually indicia at least for
15 these five that the switching of on and off would
16 likely be the case.

17 But I have not analyzed data for all the
18 Googlers, so I don't know.

19 I have also analyzed the record from
20 deposition testimonies that specifically talked to the
21 patterns of switching history on and off, and those
22 were not indicative of there being a pattern of using
23 the toggle in some sort of a substantial and frequent
24 manner.

25 So those are the two pieces of information I

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1 have, so that's the conclusion I can make about those
2 particular individuals.

3 BY MR. COLLIER:

4 Q Okay. I -- I must -- I'm not trying to trick you.
5 I think we're in agreement on this, but let me try it -- let
6 me see if I can state it a better way and see if we reach
7 agreement.

8 Would you agree with me, based on the five
9 employees' data as part of the Epic hold, that there is
10 little indicia that, at least those Google employees,
11 switched history on or off very often, they stayed with the
12 default, right?

13 A Right. So for those five individuals, it's not
14 just indicia, so for the five individuals, both Professor
15 Hochstetler and I can say with certainty that for the period
16 of the log dataset, they, in fact, did not do that, so we
17 know that for certain.

18 Q And it -- and it goes both ways, right?

19 When the history was defaulted to off, you don't
20 see a lot of indicia of many turning it on, and when the
21 history is defaulted to on, you don't see a lot of indicia
22 of turning it off, right?

23 A Well, that is not exactly correct. It's
24 approximate.

25 So in the dataset of Professor Hochstetler and I

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1 have analyzed, we actually see evidence, even before
2 February of 2023, of other Googlers switching the history
3 on, but it's not the five individuals who do switch the
4 toggle.

5 Now the rate of switching the history on is
6 relatively de minimis as both Professor Hochstetler and I
7 observed, but it is there.

8 So some communications were, in fact, preserved
9 for the five custodians, subject to the -- as you called it,
10 the Epic log, prior to February 2023.

11 Q Right. I wasn't trying to get you to say all or
12 none. That wasn't my intention.

13 I thought I asked the question in a way, but you
14 said -- so let me use your wording and make sure I'm
15 understanding.

16 From your study of the Epic log, you and Professor
17 Hochstetler do agree that the rate of switching history on
18 is relatively de minimis, right?

19 MR. MCCALLUM: Object to the form.

20 THE WITNESS: Correct. I'll agree with that,
21 based on the data we've reviewed, yes.

22 BY MR. COLLIER:

23 Q Okay. And for the jurors who didn't study
24 economics or Latin or go to law school, de minimis means
25 what?

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1 A Minimal, but not zero.

2 Q Less than 5 percent?

3 A It -- it could be. It depends on context.

4 Here, the numbers would be on that order of
5 magnitude, yes, that's correct.

6 Q So just talking rough orders of magnitude. I'm
7 not asking for specifics, and we'll get more into specifics
8 later.

9 If less than 5 percent of the chats had someone
10 switching history to on prior to February of 2023, that
11 would indicate generally rough numbers, that 95 percent of
12 the chats would have not gone to the Vault and 5 percent-ish
13 or less would have gone to the Vault prior to 2023,
14 February 2023?

15 MR. MCCALLUM: Object to the form.

16 THE WITNESS: I think the context of the
17 hypothetical and the five custodians in particular
18 during the log period, I would agree with that.

19 BY MR. COLLIER:

20 Q So there's no way for us to tell the contents, as
21 far as you -- and I know you're not giving a technical
22 expert opinion, but based on what you know, there is no way
23 to know what's in the 95 percent of the chats that didn't go
24 to the Vault prior to February of 2023, is there?

25 MR. MCCALLUM: Object to the form.

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1 THE WITNESS: So, right.

2 As I sit here, I'm not aware of any other
3 tool that would look at the ephemeral messages that
4 disappear after 24 hours.

5 If it exists, I just haven't been made aware
6 of it.

7 BY MR. COLLIER:

8 Q And you said "ephemeral." What do you -- can you
9 tell the jury what ephemeral means?

10 A Within the Google Chat logs, there's a specific
11 reference to [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 Q And what I really meant was, ephemeral means it
17 goes away, right, wispy, ghost, goes away?

18 MR. MCCALLUM: Object to the form.

19 THE WITNESS: Sure. Whatever the synonyms
20 might be in the Webster dictionary.

21 BY MR. COLLIER:

22 Q Well, I haven't looked them up, do you have any?

23 A I do not specifically, no.

24 Q Ephemeral means nontangible, nonpermanent. We can
25 agree on that, right? Nonpermanent because it's the

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1 opposite of what you call permanent, right?

2 A Right. That's fair.

3 I mean, I'm not a linguistics expert, but in
4 common parlance, I would say yes.

5 Q Okay. I'm able to skip a few documents, so give
6 me just a moment, I promise this is in your best interest.

7 Okay. I'm going to hand you what I'm marking as
8 Exhibit 8. It's double-sided printed, so you have to flip
9 it over. I wasn't sure why we did that.

10 And, for the record, Exhibit 8 is GOOG-AT-MDL-B-
11 4067793 through 94.

12 MR. MCCALLUM: Is this a complete document?
13 It appears to be missing some of the header that we've
14 seen on prior documents.

15 MR. COLLIER: Oh, I removed the metadata,
16 which had on the back of the first page. So let me
17 give you a complete exhibit that was -- I was just
18 trying to not give you the metadata because it didn't
19 matter.

20 Can I have that back and I'm going to give
21 you a complete exhibit?

22 Thank you, Mr. McCallum, for pointing that
23 out.

24 So I hereby give you Exhibit 8 to which would
25 be the Bates Number 4067792 through 94.

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1 And then I have yours. Sorry for the
2 confusion.

3 BY MR. COLLIER:

4 Q Tell me when you've had a chance to read that.

5 A Okay.

6 Q All right. This appears to be a chat from March
7 of 2020; is that fair?

8 Oh, excuse me, March of 2017.

9 A I would agree with your first dates, so March of
10 2020, but I think it spans March 17th, maybe through --
11 yeah, it says March 17th of 2020, that would be my --

12 Q Oh, I --

13 A -- my interpretation of the timestamps.

14 Q I think you are correct. I apologize.

15 Okay. March of 2020.

16 So do you see here in the very beginning of the
17 chat, an individual -- I'll presume female, although maybe I
18 shouldn't, [REDACTED], says: [REDACTED]

19 [REDACTED]
20 Do you see that?

21 A I see that statement. Or question, yes.

22 Q And then her next sentence is: [REDACTED]

23 [REDACTED] Right?

24 A I see that question as well, yes.

25 Q And what do you understand a pub to be in the

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1 context of this lawsuit? Not in the context of an English
2 drinking establishment.

3 A I'm not sure exactly. I could guess maybe
4 publications, but that would be a guess, I'm not sure.

5 Q Are you aware that this antitrust suit involves
6 advertisers and publishers?

7 A Generally. So if you're representing that this
8 refers to publishers, I have no reason to disagree, but I
9 don't know.

10 Q Well, what do you understand this lawsuit to be
11 about?

12 A It's a very general understanding of -- there are
13 various antitrust and unfair competition, both federal and
14 state-based claims against Google's -- part of Google's
15 business related to advertising technologies. That's sort
16 of the -- what my general understanding is.

17 Q In what ways does this relate to Google's business
18 as related to advertising technologies, the case?

19 A I would speculate. I mean, I've reviewed the
20 complaint, it's -- early on, so about maybe, you know, a
21 month and a half ago, but I don't have a specific
22 recollection as to the specific, you know, products or
23 issues, that's not something I -- I've studied in this case.

24 Q Do you know of any competitors to Google in the ad
25 tech space?

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1 A Not specifically. I haven't studied that market.

2 Q Okay. I want you to assume with me, and I will
3 represent to you that pubs means publishers.

4 Can you do that?

5 A Yeah. If you represent it to me, sure, no
6 problem.

7 Q I'm sure your counsel would be objecting if he
8 thought it meant something else.

9 Okay. You understand as an antitrust economist
10 that a Google employee talking about [REDACTED]
11 [REDACTED] could be relevant to this lawsuit, right?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: I mean, I see that this
14 particular document has been produced, so, I mean, that
15 would be one inference, but I don't have an independent
16 knowledge, again, of the relevance of documents.

17 BY MR. COLLIER:

18 Q Okay. If we look at the second page of this
19 document, 793.

20 Halfway down, [REDACTED] is now talking about
21 [REDACTED].

22 A I'm sorry.

23 Q If we could also go up to the previous two. Yeah,
24 there we go.

25 Where she starts talking about more on [REDACTED]

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1 [REDACTED]. About a little less than
2 halfway down the page.

3 A I see that, yes.

4 Q Okay. Do you have any understanding of what [REDACTED]
5 [REDACTED]?

6 A I really don't. I have no understanding of
7 that --

8 Q Okay.

9 A -- lingo, no.

10 Q Do you have any understanding of what a [REDACTED]
11 [REDACTED] is?

12 A It's not a phrase I'm familiar with. I'm not sure
13 what this is referencing, especially in the context of plat
14 versus off.

15 I -- I cannot even guess, actually.

16 Q Okay. So if we turn now to the last page, there's
17 a discussion about [REDACTED]
18 [REDACTED].

19 Do you see all that? Or do you see that sentence
20 I should say?

21 A Okay, I see it now.

22 Q And before that, there's a reference by [REDACTED]
23 [REDACTED].

24 Do you see that?

25 A Okay. I see it.

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1 Q Okay. After there's some conversation about
2 [REDACTED], I want you to scroll down to where
3 [REDACTED] says: [REDACTED]

6 Do you see that?

7 A I do see that sentence, yes.

8 Q And then 19 seconds after [REDACTED] says: [REDACTED]

10 what's his next phrase?

11 A OMFG. I think that's the next one.

12 Q And what does OMFG mean?

13 A I assume it's oh, my, something, God. But I don't
14 know -- I don't know [REDACTED], so I don't know what he
15 used for F.

16 Q Okay. But you -- you -- you know and I know the
17 OMG is: Oh, my God with an F word as the descriptor, right?

18 A Most likely.

19 Q Most likely. You got a good hunch on what that F
20 word might be?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: I have some guesses.

23 BY MR. COLLIER:

24 Q Does it resemble the word "fire truck," it begins
25 with an F, ends in UCK, maybe an ING?

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1 MR. MCCALLUM: Object to the form.

2 THE WITNESS: I was certainly hoping for an
3 ING version.

4 BY MR. COLLIER:

5 Q And then after he says: "OMFG," five seconds
6 later, what does he say?

7 A "History is on, Jesus." With lower capital Jesus.

8 Q And then he sighs, though he types out sigh.
9 Right?

10 A Right. 49 seconds later, yes.

11 Q Yeah. Thought about it a little while.
12 Where's the rest of this chat? Scroll down.
13 Where's the rest of this chat?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: I don't know if there is
16 anything after this, so I -- I have -- this is the
17 first time I'm seeing this chat.

18 BY MR. COLLIER:

19 Q Sure. I understand.

20 And you understand, [REDACTED], as soon as he
21 realized history was on, this chat came to a complete halt,
22 as least as produced, right?

23 MR. MCCALLUM: Object to the form.

24 THE WITNESS: Based on the document that you
25 gave me, that certainly appears to be the case, but I

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1 don't know.

2 BY MR. COLLIER:

3 Q Okay. Do you draw the impression from this
4 exhibit that maybe [REDACTED] didn't want this
5 conversation about [REDACTED]

6 [REDACTED]?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: I'm not sure. I mean, clearly
9 this document has been produced and the history was on,
10 so you'll have to ask [REDACTED] specifically.

11 I'm not sure.

12 BY MR. COLLIER:

13 Q Does it impact your expert opinion in any way if
14 there is evidence that Google employees, when they knew
15 history was on, ceased chatting and, say, picked up the
16 phone and continued the conversation?

17 MR. MCCALLUM: Object to the form.

18 THE WITNESS: I mean, I lay it out in my
19 expert report, but in the -- in the context of a
20 conversation like this one, I understand that as of
21 2020, there was a specific policy that guided
22 communications for folks who are on hold.

23 And while I don't recall [REDACTED]
24 specifically, at least Ms. Pappu, who's also on the
25 chain, would have been part of the litigation hold, so

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1 she would have received specific communications about
2 what kind of Chat messages should be preserved versus
3 shouldn't. So that's the context in which I analyzed
4 the data more generally.

5 For this specific communication, I cannot
6 tell you if it continued or not, but it's not
7 inconsistent, in my mind, with the policy since it has
8 been produced.

9 BY MR. COLLIER:

10 Q Right. One reason it was produced is because
11 [REDACTED] didn't know he was chatting with history on,
12 right?

13 MR. MCCALLUM: Object to the form.

14 THE WITNESS: I -- I cannot tell you that,
15 whether that's the reason.

16 BY MR. COLLIER:

17 Q Is that a reasonable inference?

18 MR. MCCALLUM: Object to the form.

19 THE WITNESS: I -- I mean, I assume more so
20 it had to do something with the agreement between the
21 parties in this case as to what documents or chats
22 should be produced, but I -- again, I'm not an expert,
23 I don't actually know exactly what the -- what the
24 process was specifically for production.

25 MR. COLLIER: I'm going to hand you what we

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1 are marking Exhibit 9; is that correct? Is that 8?

2 THE WITNESS: I have 8.

3 BY MR. COLLIER:

4 Q Okay, good. Exhibit 9.

5 Ask you to review this. And for the record, it is
6 GOOG-AT-MDL-B-4439513 to 9515.

7 A Okay.

8 Q Okay. Looking at Exhibit 9. First page.

9 Do you understand on the -- well, first of all, is
10 this a chat from November of 2021, as best you can tell?

11 A Yes. All the messages, the original messages are
12 dated November 19th, 2021.

13 Q And can you see on the first page, the very first
14 message says -- the first substantive message, there's some
15 updated room membership. Do you see that?

16 You don't understand that to be anyone typing that
17 out, right, that's the system saying somebody joined or
18 dropped, right?

19 A That's fair.

20 Q Okay. The very first substantive message here is
21 from [REDACTED]

22 Do you see that?

23 A I do.

24 Q And how does his -- can you read his sentence he
25 wrote there?

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1 A It says: [REDACTED]

2 [REDACTED]

3 Q So what Chat message is he referring to when he
4 says -- or she, when he says: "In comparison"?

5 MR. MCCALLUM: Object to the form.

6 THE WITNESS: Well, based on this document, I
7 cannot tell.

8 BY MR. COLLIER:

9 Q Right. It appears from the face of this produced
10 document that there were prior Chat messages that were not
11 retained, right?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: I'm not sure. I couldn't tell
14 you.

15 BY MR. COLLIER:

16 Q From context, when the very first substantive
17 message is: "In comparison," does it lead you to believe
18 that there might be other Chat messages that were not
19 preserved?

20 MR. MCCALLUM: Object to the form.

21 THE WITNESS: I really don't know one way or
22 the other. I mean, there's all sorts of possibilities.
23 I would just speculate.

24 BY MR. COLLIER:

25 Q Okay. One possibility is, as we discussed before

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1 when we were looking at Exhibit 7 and Exhibit 6
2 hypotheticals, that there were some messages that had
3 history off, and then [REDACTED] November 19th, 2021 message,
4 11:39:42 was the first message that was sent with history
5 turned on.

6 That could happen, right?

7 A It's technically possible, but I don't know. I
8 mean, there's -- there's many different possibilities here.

9 I just really don't know.

10 Q What's the other possibility?

11 A Well, I mean, this is clearly a group chat, so
12 it's possible that it's connected to, for example, a video
13 conference call, or just the content is actually being
14 spoken on the call, and then some folks are live typing in
15 messages, I mean, the timestamp here is UTC, so that seems
16 like a reasonable time of the day in the U.S., at least.

17 So I just don't know. I mean, I can speculate,
18 but I really don't know. I mean, I think you'd have to ask
19 the individuals here what exactly happened.

20 Q So if we go down to the very -- near the bottom
21 where it says: [REDACTED] -- excuse
22 me -- [REDACTED]
[REDACTED]

24 You know what WRT stands for, right?

25 A Well, I typically use it to mean with respect to.

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1 Q Yeah. Or with regard to, I've used it.

2 A Or for example, yes.

3 Q Okay. So as someone who's given antitrust
4 economic testimony, you're aware that market share is
5 generally an important topic in antitrust cases, right?

6 MR. MCCALLUM: Object to the form.

7 The witness has testified that he didn't
8 study the markets in this case.

9 MR. COLLIER: I'll object to the coaching of
10 the witness.

11 BY MR. COLLIER:

12 Q I'm just asking generally. Is market share a part
13 of antitrust?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: Typically, my experience, yeah,
16 that's one of the -- one of the concepts that
17 economists study.

18 BY MR. COLLIER:

19 Q Looking to see basically whether or not someone
20 may have monopoly power, for example, right?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: I mean, that's certainly one
23 context in which market shares are studied, yes.

24 BY MR. COLLIER:

25 Q Okay. So now let's continue on in this chat.

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1 On the next page, the top of the next page, which
2 is Bates Number 514, sent -- an individual named [REDACTED]
3 [REDACTED].

4 It says: [REDACTED]
5 [REDACTED]

6 Do you know to [REDACTED] is?

7 A I do not, no.

8 Q Do you know what [REDACTED] means?

9 A I do not.

10 Q Okay. So we continue down, and then [REDACTED]
11 says -- the question is: [REDACTED]
12 [REDACTED]

13 Do you see that?

14 A I do see that.

15 Q And then the very next comment is: [REDACTED]
16 [REDACTED]

"Quick aside, do we want history on"?

17 A I see that, yes.

18 Q And what was the answer to that question?

19 A No.

20 Q No, in all caps, right?

21 A Yes. No is capitalized, both letters.

22 Q Okay. So after [REDACTED] says: "No," in all caps,
23 what is the next message by a Google employee?

24 A That would be from [REDACTED]. It says:
25 "History is on. I suggest everyone leave the room and

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1 create a new one with history off. I am happy to punt
2 everyone out."

3 Q And then what happened?

4 A It looks like a -- my copy's a little hard to
5 read, but it looks like a thumbs up emoticon.

6 Q Right. And then if we go to the next page, once
7 he got the thumbs up, what did tris say?

8 A He says: "Okay. Booting everyone now."

9 Q So if [REDACTED] was telling the truth, then everyone
10 left this chat room where history was on and he created a
11 new one with history off; is that fair?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: Yeah. I don't know what
14 happened. I mean, even if what [REDACTED] says is intended
15 truth, I don't -- I have no knowledge of what happened
16 after -- I just don't know.

17 BY MR. COLLIER:

18 Q Well, one thing this does tell us is that at least
19 some Google employees knew how to wire around a history on
20 chat room, right?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: I apologize.

23 What was the word that you used in your
24 question?

25 MR. COLLIER: Wired around. They did --

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1 well, let me ask it this way, because that may be a
2 phrase that, you know, isn't used elsewhere.

3 BY MR. COLLIER:

4 Q One thing we know from this is when Google
5 employees, in this particular chat realized history was on,
6 they came up with a plan to boot everyone out of that room
7 and open a new chat room with history off, right?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: Again, I really do not have
10 like -- certainly not personal knowledge, but even from
11 the context around these documents, I don't -- I don't
12 know -- I cannot tell you one way or the other.

13 I mean, this is the first time I'm seeing
14 this document, and I don't know if there's anything
15 else in the context of it or if these individuals were
16 deposed and said something else.

17 I -- as I sit here, I have not reviewed that
18 testimony and I have not seen, you know, their other
19 chats. I just simply don't know.

20 BY MR. COLLIER:

21 Q Okay. But what you do know from this chat, if we
22 can go to the history.

23 What you do know is [REDACTED] told everyone: "History
24 was on," right?

25 A Yes.

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1 Q You know that [REDACTED] suggested everyone leave the
2 room and create a new room with history off, right?

3 MR. MCCALLUM: Object to the form.

4 THE WITNESS: This sentence says that, yes.

5 BY MR. COLLIER:

6 Q We also know that he got a thumbs up from [REDACTED]
7 right?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: Yes.

10 BY MR. COLLIER:

11 Q And after getting a thumbs up from [REDACTED],
12 [REDACTED] said: "Booting everyone now."

13 The first part of the plan, right?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: Yes. I see that.

16 BY MR. COLLIER:

17 Q And after [REDACTED] booted everyone from the chat room
18 with history on, there is no more chat contained within at
19 least this Chat message, correct?

20 MR. MCCALLUM: Object to the form.

21 THE WITNESS: Yes, at least on this document,
22 yes, that's correct.

23 COLLIER: Okay. Thank you. You can put that
24 to the side.

25 MR. MCCALLUM: We've been going just over an

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1 hour, Counsel, so whenever there's a convenient
2 opportunity for a break.

3 MR. COLLIER: We'll take a break right now.
4 Sorry, I didn't notice. Unless you want to keep going.

5 THE WITNESS: I'm happy to take a break.

6 MR. COLLIER: We'll do it.

7 THE VIDEOGRAPHER: The time right now is
8 11:28 p.m. We are off the record.

9 (Recess taken at 11:28 p.m.)

10 THE VIDEOGRAPHER: The time right now is
11 11:52 a.m. We are back on the record.

12 BY MR. COLLIER:

13 Q Mr. Malkiewicz, I'm handing you what we are
14 marking as Exhibit 10. And it is GOOG-AT-MDL-B-4584048 to
15 049.

16 Just let me know when you've taken a look at that.

17 A Okay.

18 Q All right. Would you agree with me that -- is
19 this Exhibit 10? I'm sorry.

20 A 10, yes.

21 Q Would you agree with me that Exhibit 10 shows
22 Google employees confused about the effect of history on and
23 history off?

24 MR. MCCALLUM: Object to the form.

25 THE WITNESS: I'm not sure. I mean, this

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1 appears to be another conversation between people -- or
2 Google employees who are -- seem to be, you know,
3 technically involved in the chat tool.

4 So, certainly, they're discussing updates to
5 it, but I -- that's all I can see from the context of
6 this message.

7 BY MR. COLLIER:

8 Q All right. If we look at the bottom of the first
9 page, there's an individual, it's long,
10 [REDACTED].

11 I know I'm mangling their name, and I apologize to
12 them if they ever read this, but can you see where that
13 person makes his or her first comment in the chat?

14 A I do see that, yes.

15 Q So, first, she's quoting a question from [REDACTED]
16 [REDACTED], or a comment from [REDACTED], where [REDACTED] says:
17 "Also, a lot of times even after history on, old chats are
18 unavailable."

19 Do you see that?

20 A I see that.

21 Q And do you understand the next two -- three
22 sentences to be from [REDACTED] to be answering that
23 comment or addressing that comment?

24 A That's what it appears.

25 Q Okay. So [REDACTED] says, in response to --

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1 even after "history on, old chats are unavailable," that's
2 because it retains chat conversation that occur after
3 turning the history on. It doesn't retain anything from
4 before.

5 Do you see that?

6 A I do see that.

7 Q Is -- is that basically saying what we talked
8 about when we did the hypotheticals, Exhibit 6, Exhibit 7,
9 where some chats would not be retained because history was
10 off when they were sent and some chats would be retained
11 because history was turned on?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: I mean, it's consistent with my
14 understanding and I believe with what we've discussed
15 so far.

16 BY MR. COLLIER:

17 Q And the next sentence says: "Ideally, it should
18 retain everything."

19 Do you see that?

20 A I see the sentence, yes.

21 Q Do you know as a technical issue whether Google
22 Chats and Google Vault had the ability, technically, to
23 retain all chats, including those that were sent while
24 history was off, after someone turns history on?

25 Or put more plainly, could Google have retained

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1 everything?

2 MR. MCCALLUM: Object to the form.

3 THE WITNESS: I don't know for a fact. I can
4 only infer from the policy that's been implemented
5 after February 8th of 2023, which in my understanding
6 for a period of time Google was able to send to Vault
7 all the chats with history on, but I'm -- I have no
8 information or knowledge of what was possible or not in
9 April of 2022.

10 BY MR. COLLIER:

11 Q Okay. And when you say Google was able to send to
12 the Vault -- can we go back to the Elmo?

13 Do you remember Exhibit 7, our hypothetical? I'm
14 showing it again, where it says -- where we have the chain
15 here, where some chats were history off, some were on. We
16 agreed history off doesn't go to the Vault, history on
17 would.

18 The question I want to make sure I'm asking
19 correctly is: In this scenario, prior to 2023, did Google
20 have the technical ability, when history was turned on "on"
21 this third chat, to collect chats 1 and 2?

22 A Well, so the hypothetical is a little difficult
23 for me to conceptualize within the policy after 2023.

24 The reason I say this is because with the policy,
25 the way it was implemented in my understanding after

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1 February of 2023, if that same policy was implemented
2 before, where certain users simply did not have the ability
3 to switch the history to off, then your hypothetical would
4 never be a situation to begin with, right, because certain
5 users would simply, even if they tried, they wouldn't be
6 able to switch the history on.

7 So in that sense, every message would have been
8 retained, but I don't know for a fact that Google had the
9 technical ability to implement its 2023 post-February policy
10 earlier.

11 So that's the best I can -- I can answer that
12 question as I sit here.

13 Q Did you read the deposition of [REDACTED]?

14 A I have, yes.

15 Q Did you read where I asked [REDACTED] -- let me --
16 let me back up and start that over again.

17 I'm actually going to put up Exhibit 6. It's the
18 same thing, just different words on the text, but it's
19 easier to point to.

20 Look at that.

21 Our demonstrative Exhibit 6, if this said: "March
22 of 2023," so we get past February, or what date in February
23 it was, but, you know, the current world.

24 Is it your understanding that all four of these
25 messages, if sent in March of 2023, would have gone to the

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1 Vault?

2 A Well, so in my understanding, after February 2023,
3 all of the agreed custodians by the party, as well as all of
4 the other Google employees who were put by Google on
5 litigation holds, whether they're approved or agreed to
6 custodians or not, those individuals would never be in this
7 hypothetical because they had no option to be able to use
8 the chat with the history off setting. Even if some other
9 Google employees tried to change the chat into off, they
10 wouldn't be able to do it with those individuals.

11 So that's my understanding of how the policy was
12 implemented, given the technical limitations that [REDACTED]
13 outlined in the deposition that you took.

14 Q What do you mean "the technical limitations [REDACTED]
15 [REDACTED] outlined?" You mean the 100 hours of coding work that
16 they'd have to do?

17 MR. MCCALLUM: Object to the form.

18 THE WITNESS: Correct. Implemented the way
19 it was implemented.

20 So, to make it clear, the change that took --
21 that particular effort did not solve the issue of the
22 pre-February 2023 of solving the issue of ephemeral
23 messages with history off being sent to Vault. That's
24 my understanding based on the deposition testimony.

25 Again, as, you know, reading for context

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1 rather than as a technical reading of it.

2 BY MR. COLLIER:

3 Q So do you recall when I deposed [REDACTED] that
4 Google has had, for years, a version of Google Chat designed
5 for the financial industry?

6 MR. MCCALLUM: Object to the form.

7 BY MR. COLLIER:

8 Q Do you recall this testimony?

9 A Vaguely. Not specifically, but I recall some
10 discussion around it.

11 Q Do you recall that [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

15 MR. MCCALLUM: Object to the form.

16 THE WITNESS: It sounds familiar, but it's
17 been -- I have not reviewed that section of [REDACTED]
18 testimony, but it does not sound surprising to me.

19 BY MR. COLLIER:

20 Q Do you ever work in the FINRA financial space, in
21 your testimony, in your consulting?

22 A In my consulting, yes.

23 Q And are you generally aware that in FINRA, there's
24 some strict obligations to keep documents among companies in
25 that space?

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1 A I'm not familiar with that part of the industry,
2 no.

3 Q Are you aware as we sit here of any reason that
4 Google couldn't have used [REDACTED]

5 [REDACTED]
6 [REDACTED]?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: I have no knowledge of one way
9 or the other. I believe I do know that Google itself
10 is not part of FINRA, so it's not regulated by it, but
11 I don't know if -- what Google could or could not do.

12 BY MR. COLLIER:

13 Q All right. I'm handing you what I have marked as
14 Exhibit 42 -- excuse me, Exhibit 11.

15 It will be GOOG-AT-MDL-B-8033073 to 3076.

16 A Okay.

17 Q All right. Looking at the first page of this
18 chat, had you reviewed this chat before today, by the way?

19 A I had not, no.

20 Q Okay. Looking at the very first line by [REDACTED]
21 he says: "30 days seems far too short." And then:
22 "[REDACTED] is the alias to raise this up
23 to."

24 That doesn't seem like the first message in this
25 chat, does it? From context, I mean?

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1 A I do not know. I mean, this is, again, output
2 from Vault, so I'm not sure if there's an additional
3 document simply split because of the 24-hour period, but on
4 this document, I'm not even sure where this message was
5 specifically posted, because it's threaded, so --

6 Q Right.

7 A It's possible that it's posted to some group, I'm
8 not sure.

9 Q Well, wherever -- I'm sorry. I don't mean to
10 interrupt. If you were done.

11 A No. So for this particular conversation, that's
12 where it starts. That's what it appears, given the way the
13 Vault keeps and outputs the --

14 Q Right. The retained version of this chat starts
15 with this, but it would appear from context that there's
16 some exchange that's not present in this document, right?

17 MR. MCCALLUM: Object to the form.

18 BY MR. COLLIER:

19 Q No one just starts a conversation with "30 days
20 seems far too short" out of the blue, do they?

21 A Well, so my comment is that based on this document
22 alone, one cannot tell whether there isn't another Bates
23 stamp document with the previous message being sent 24 hours
24 previously that would be output by vault as a separate
25 conversation, but the way we're using the word

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1 "conversation" here, you could connect it to documents. So
2 based just on this alone, I don't -- I don't know.

3 Q And another possibility is just like Exhibit 6,
4 our hypothetical -- and I'll just hold it up, I won't put it
5 on the Elmo.

6 Our hypothetical, there could be some messages
7 that were sent with history off, this being February of
8 2022, that just didn't get retained, right?

9 A I think it's technically possible, but my point is
10 I just don't know.

11 Q That's fair.

12 So after [REDACTED] says: "30 days seems far too
13 short," can you scroll down a little bit?

14 And you say -- [REDACTED] says: "When you say 30
15 days is too short, why is that too short for 1-1s?"

16 Do you understand that to be one-on-ones?

17 A I do.

18 Q And then someone else jumps in, [REDACTED] and
19 says: "Because chat is not ephemeral, it remains
20 potentially useful forever."

21 Do you agree that chats can remain potentially
22 useful forever for Google employees?

23 MR. MCCALLUM: Object to the form.

24 THE WITNESS: I do not know about Google
25 employees. I see that -- what that particular Googler

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1 is saying.

2 BY MR. COLLIER:

3 Q Okay. Do you have any reason to disagree with
4 ralfharing that at least to him, chats can remain
5 potentially useful forever?

6 MR. MCCALLUM: Object to the form.

7 THE WITNESS: I personally don't know what
8 exactly Mr. [REDACTED] is thinking here. I mean, I've
9 read through the document, I see there are others who
10 sort of tried to balance and explain pros and cons.

11 But, again, personally I -- I do not have an
12 opinion in that area.

13 BY MR. COLLIER:

14 Q And then -- and I know you don't have an opinion
15 in this area, but let me see if you have an opinion on the
16 next chat on this thread that says: "Plus 100 to this."

17 What do you understand plus 100 to this to mean in
18 chat, bulletin board type conversations?

19 A I would really be speculating. I mean, maybe it's
20 equivalent to thumbs up or something along these lines, but
21 I'm not sure, I'm not familiar with that jargon.

22 Q Okay. And then [REDACTED]. I'll say [REDACTED]
23 Again, apologies to the employee if he or she ever reads
24 this.

25 Says: "At every one of my previous jobs, it has

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1 been the case that people, including myself, have
2 searched/gone back multiple months in 1-1 chat histories in
3 order to find key aspects of prior discussions and
4 conversations. In many cases, the 1-1 chat history is the
5 only summary of something that was discussed in a brief
6 face-to-face conversation, parens, hallways/lunch
7 tables/video chat, et cetera," period.

8 And then a new paragraph.

9 "As an example, at PayPal, parens, my previous
10 company, closed parens, all chat history was preserved for
11 three years."

12 Do you see that?

13 A I do see that.

14 Q Do you have any reason to doubt Mr. [REDACTED] that he
15 searches, at least in his previous jobs, chat histories
16 going back multiple months to find key aspects of prior
17 discussions and conversations?

18 MR. MCCALLUM: Object to the form.

19 THE WITNESS: I do not have a specific reason
20 to either argue or support that Googler's opinion.

21 BY MR. COLLIER:

22 Q Okay. Do you have any reason to oppose his
23 opinion that in many cases, the one-to-one chat history is
24 the only summary of something that was discussed in a brief
25 face-to-face conversation, parens, hallways, lunch tables,

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1 video chats, et cetera, closed parens?

2 MR. MACCALLUM: Object to the form.

3 THE WITNESS: Not in any more systematic way
4 than, you know, pointing to other Googler's testimony,
5 who use chat tool differently than this particular
6 Googler.

7 But I, again, for him specifically, I have no
8 reason to disagree with his usage pattern.

9 BY MR. COLLIER:

10 Q So is it possible that different Googlers use chat
11 in different ways. Is that possible?

12 A It's certainly possible.

13 Q Some may use chat for more substantive
14 conversations, while some may use it mainly for
15 non-substantive conversations, right?

16 A That's fair, yes.

17 Q Do you happen to know if at PayPal all chat
18 history's preserved for three years?

19 A I do not know specifically, but in the context of
20 what you've described as, you know, there being stricter
21 regulations, companies dealing about financial data, which
22 PayPal would be an example of a payment platform, that
23 wouldn't surprise me necessarily.

24 Q Okay. That's it for that document. Thank you.

25 I'm going to hand you what we're marking as

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1 Exhibit 12.

2 This is a page with a cover page of metadata --
3 oh, it was produced as a native file, which is why I'm
4 giving you a cover page with metadata that has the Bates
5 numbers.

6 And the Bates numbers begin with GOOG-DOJ-1485029.
7 And this is a spreadsheet. I'm not going to ask you any
8 questions about it other, than have you seen it. And it's
9 really hard to read. Small print.

10 Again, my only question is: Have you seen it
11 before today. I'm not going to ask you substantive
12 questions.

13 A It does not appear -- like I don't have a
14 recollection of seeing it. So if the only caveat, if it is
15 in my materials relied upon, then I would have at least
16 glanced on it.

17 I do not have any particular recollection of this
18 document. If it's not on my materials relied upon list, I
19 certainly have not seen it.

20 Q Okay. So watch this. Lawyers can keep their
21 promise. We're done with that.

22 Are you familiar with the Federal Trade
23 Commission's guidance on Google Chats and whether they
24 should be preserved?

25 A Not intimately. More as a background. I've seen

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1 it, I believe I have it referenced in my report as well, but
2 I'm not an expert on the guidance itself. I've just
3 generally reviewed the document.

4 Q Well, to save a lot of time, or maybe I can't save
5 you time, but let's see.

6 Are you aware that the FTC has said that Slack,
7 Google Chats, and other collaborative messaging platforms,
8 have always been and will continue to be subject to document
9 request?

10 MR. MCCALLUM: Object to the form.

11 Can we get a time frame?

12 THE WITNESS: I believe I've seen the
13 specific sentence you're reading specifically. So it
14 does ring a bell.

15 So I would have been aware of it, at least as
16 I sit here right now, it does. I would have reviewed
17 that particular sentence.

18 BY MR. COLLIER:

19 Q Okay. I'm going to hand you what I've marking as
20 Exhibit 13. And, for the record, this is
21 GOOG-AT-MDL-B-9709508.

22 And my first question will be, did you review this
23 prior to today, which I believe you said in your materials
24 you have, but I don't want to put words in your mouth.

25 A Yes, that looks right. So whenever I see a

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1 document like this, my first thing will be to check whether
2 I've seen that exact copy of it with a Bates stamp, but --

3 Q Fair enough.

4 A -- if you represent to me that it is in my
5 materials, then that is exact copy that I would have
6 reviewed.

7 I've certainly reviewed Google Chat retention
8 policies, more than one.

9 Q Well, right. And the only thing I hesitate on
10 Bates numbers is, sometimes the same document get produced,
11 in this case several times, because there's different
12 litigations in all this.

13 So really what I'll just represent to you is: My
14 understanding is that this was Google's first official chat
15 policy as testified to by [REDACTED].

16 Is that your understanding of this chat policy,
17 it's Google's first official chat policy from February --
18 well, it might be from November of 2020?

19 MR. MCCALLUM: Object to the form.

20 THE WITNESS: Right. I don't recall as I sit
21 here seeing an earlier policy, and I have no reason to
22 dispute [REDACTED] characterization of this document.

23 BY MR. COLLIER:

24 Q All right. And can you look at the Google's chat
25 retention policy, Exhibit 44 -- well, actually I'll just ask

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1 you.

2 Nowhere in Google's first official chat policy did
3 they instruct Google employees to turn history on if they
4 were on a litigation hold, did they?

5 A It does not appear to use the words you've used,
6 but certainly under the legal hold section, it does describe
7 the quote: "Your Google chats described below will be
8 preserved automatically. All retention periods are paused
9 for the purpose of legal holds."

10 Q Okay. So it does not instruct the employees to
11 turn on history on, right?

12 A Correct. Not in this policy.

13 Q Okay. And what this policy does say is that these
14 two items -- and we're looking at the bottom on legal holds,
15 the two bullets, there we go.

16 The exhibit and the screen, if your eyes are old
17 like mine.

18 Two types of information will be preserved
19 automatically. One-on-one -- excuse me. On the record,
20 one-on-ones, group DMs and flat rooms.

21 Do you understand that?

22 A Yes.

23 Q So certain on the record documents will be
24 retained. And then threaded room conversations in which
25 you've participated, i.e., sent a message, not just

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1 received.

2 A Yes.

3 Q So what is not being preserved automatically is
4 off the record, history off chats, right, under this Google
5 retention policy?

6 A At least as is stated here, that's -- that would
7 be my interpretation as well.

8 Q And then if we look at the second bullet, I think
9 we've touched on this a little bit before, but just to bring
10 it home.

11 In the threaded room conversations, it says:
12 "Sent a message, not just received." And this is part of
13 our discussion earlier, which is the history on or history
14 off has to be communicated in a sent message, right?

15 You can't just turn it on without sending a
16 message?

17 A Well, so it's a little more than that, right?

18 Q Okay.

19 A So this is specific to the threaded rooms.

20 So an example of which we've discussed in, I
21 believe, Exhibit 11. So that is exactly what gave me a
22 pause with, you know, given that there's an individual in
23 litigation hold, even under this policy, the entirety of the
24 threaded room, according to this policy, would have been
25 kept. So that's why my caveat.

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1 But again, I -- I don't have an independent way of
2 verifying technical implementations at Google.

3 Q Okay. Let's -- can we turn the Elmo back on?

4 So I want to ask this on a one-on-one, this is
5 Exhibit 6. Demonstrative.

6 I don't know why the zoom doesn't work.

7 Can we see the 6 now? That's good enough.

8 When we say in the hypothetical for Exhibit 6, you
9 know, history on, that doesn't just mean that person A went
10 and turned history on. It had to be turned on in connection
11 with this third message: "We have worked hard on our ad
12 tech partners."

13 Right?

14 A That's my understanding. Because otherwise the
15 message would assume the setting of a previous message.

16 Q Right. So if in this hypothetical, history was
17 off, A sends, you know: "We have a monopoly in ad tech."

18 B sends: "Yes, we do."

19 Then A is like: "Oh, that might be important,"
20 and just turns history on but doesn't send a message.

21 Nothing is retained in that scenario, right?

22 MR. MCCALLUM: Object to the form.

23 THE WITNESS: That is an interesting question
24 I have not thought of. I don't actually know whether
25 the log of an empty message would have been sent to the

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1 Vault. I don't know.

2 BY MR. COLLIER:

3 Q I'm going to ask you some broad questions. If you
4 want to see some documents, we can do that too, but I'm
5 going to see if I can save some time.

6 Can you agree with me that from your review of all
7 the documents, both in getting ready for your report, your
8 deposition, and during the deposition today, that it's fair
9 to say Google employees use chat for both substantive and
10 non-substantive business purposes, or substantive business
11 and nonbusiness purposes is probably a better way to put it.

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: That's generally fair. I mean,
14 I specifically describe it in my report as substantial
15 business, non-substantial business, as well as
16 personal, so those three categories, I mean to describe
17 sort of the spectrum of uses of Google Chat by
18 Googlers.

19 MR. COLLIER: That's fair. That's probably a
20 better way than I put it.

21 BY MR. COLLIER:

22 Q So in your three generalized categories, and I
23 realize they could be subcategorize and all that, but in
24 your three generalized categories, there is substantive
25 business, which could be things like, say, market share and

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1 other chats we've seen in chat before, right?

2 A Sure.

3 Q There could be non-substantive business, such as:
4 "Hey, are we getting those new vending machines in?" It's
5 still business related, but still non-substantive?

6 A I would agree with that, that would be -- yeah.

7 Q And then finally, it could be happy birthday. It
8 could be entirely personal. Someone talking to someone else
9 about their birthday or who won the kid's softball game?

10 A Sure, yes.

11 Q And as we sit here today, you can't tell me or
12 anyone under oath what percentage of chats would fall in
13 each of these three categories, can you?

14 A That's correct. I cannot tell you the
15 percentages.

16 Q We just know that there's chats in all three
17 because we've seen them all, or we've seen examples of all.

18 Sorry, that was a bad question.

19 A Right. So we've seen examples of all.

20 We've also -- you have taken depositions of a
21 number of Googlers on the topic, so we've seen their
22 disclosures or intents in how they use the Google Chat tool,
23 so we've seen at least these two sources of information.

24 Q Okay. And so for chats sent in conversations with
25 history off, say, prior to February of 2023, to make it

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1 easy, if they were not retained, you can't tell us which
2 categories the non-retained chats fell in, right, because
3 they don't exist anymore?

4 A That's fair.

5 Q Now, we talked about Google employees testifying,
6 and I'll see if I can shortchange a lot of transcripts on
7 this.

8 Would you agree that some Google employees
9 testified they mainly use chats for non-substantive business
10 communications, and some Google employees have testified
11 that they use chats for substantive business communications?

12 A Yes.

13 Q And, of course, there's some Googlers that also,
14 happy birthday, and the things we all do as human beings,
15 right?

16 A Yes.

17 Q And it's also possible that within a given chat,
18 and I think we've seen examples of this and we can pull some
19 back up, there might be some substantive business
20 communications and then someone interlaces non-substantive
21 or personal, and then it flips back to substantive.

22 You want to see some examples of that, or do you
23 recall?

24 A I -- I believe we've seen some examples of that
25 today. So I cannot think of a document I've seen at the

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1 time of my report. I may have, but I certainly -- I would
2 agree that we've seen some today.

3 Q Okay. And that doesn't surprise you, like human
4 beings, talk something substantive, non-substantive,
5 personal, substantive, like human beings bounce around on
6 topics all the time, don't they?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: I wouldn't say that's the
9 reason why I find it not surprising. There is other
10 reasons, including what I've reviewed as part of this
11 case.

12 So even the deposition testimony you've
13 referenced, and I've disclosed all the transcripts I've
14 reviewed, those would be consistent generally with your
15 description.

16 BY MR. COLLIER:

17 Q That's good because it saves me a lot of
18 depositions to put in front of you.

19 I'm going to hand you an exhibit marked Exhibit
20 14. It's Google-DOJ-AT-687430.

21 THE WITNESS: I believe you gave me two
22 copies of the same document.

23 MR. COLLIER: Oh. Thank you. Rob, did you
24 get your copy? Okay.

25 THE WITNESS: Okay. I have looked at the

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1 document.

2 BY MR. COLLIER:

3 Q A lot of jargon in this document, I admit.

4 If you could look about halfway down, where
5 there's a paragraph that begins: "I was going to join
6 Rita." All the way until the end of -- yeah, that
7 paragraph, which ends in the word "experiment."

8 A Okay.

9 Q Do you know what a [REDACTED] is in the
10 context of this case?

11 A I do not.

12 Q You only know it from Star Wars?

13 A And even that, only by reference.

14 Q Do you know what the reference to [REDACTED]

15 [REDACTED] means?

16 A I do not.

17 Q Okay. The last sentence, or the second sentence
18 says: [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 Do you have any understanding of what any of that
24 means?

25 A I have --

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1 MR. MCCALLUM: Object to the form.

2 THE WITNESS: Sorry. No understanding.

3 It's -- yeah, I do not.

4 BY MR. COLLIER:

5 Q Do you know if any of the plaintiff's claims
6 relate to Google pretending to be second price in publisher
7 reporting?

8 A I -- I don't know.

9 Q Okay. If the Court was to find, or the jury, that
10 this actually was relevant to the plaintiff's claims, this
11 would be, for example, an example of a substantive business
12 communication within a chat, right?

13 MR. MCCALLUM: Object to the form.

14 Can we get counsel's representations that
15 this is a chat?

16 MR. COLLIER: I can ask him if it's a chat.
17 That's what my understanding of these carets are that
18 it was threaded, but I'll ask him.

19 MR. MCCALLUM: It has a subject line which
20 suggests it's not a chat.

21 MR. COLLIER: Well, let me withdraw my
22 question and ask you.

23 BY MR. COLLIER:

24 Q Do you know if this is a chat?

25 A It does not appear to be a chat. It appears to be

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1 an e-mail sent to a group server, which would then be
2 memorialized within a group.

3 Q The normal e-mails produced by Google, I will
4 represent to you, do not have this stair stepping. Do you
5 see the right-hand facing carets, which generally means a
6 different person, a different level.

7 Is that indicative of a e-mail sent to a group
8 server which would be memorialized within a group?

9 MR. MCCALLUM: Object to the form.

10 THE WITNESS: So there's a dual system of
11 preservation for group postings that are initiated
12 through an e-mail exchange server. That's my
13 understanding of how the e-mail system works.

14 So if there was an e-mail that was -- so in
15 some cases a Googler can, instead of going into a group
16 and typing a message, they can, in fact, send an e-mail
17 from their Google account to a specific e-mail address
18 and that would be saved as an e-mail, as well as with
19 that post to a group, as if someone created that
20 message within a group.

21 And again, that's just my background and
22 understanding of how these -- why these different
23 documents generally look a little different.

24 BY MR. COLLIER:

25 Q Okay. I'm going to show you -- I'm going to show

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1 you a different -- okay. Come back to that.

2 I'm going to hand you what I'm marking as 15; is
3 that right?

4 THE WITNESS: The last one I looked at was
5 14.

6 MR. COLLIER: Okay. We'll put a real exhibit
7 sticker on this in a moment.

8 BY MR. COLLIER:

9 Q I'm not going to ask you any questions about this,
10 except looking at the first page and the format of this,
11 does this appear to be a chat conversation as opposed to the
12 last one you mentioned to me was a e-mail and to the group?

13 A Yes. Based on the format, that appears to be some
14 probably thousand Chat messages long conversation.

15 Q Okay. Put that to the side.

16 Do you recall how many Google employee depositions
17 where the Google employee said that they used chats for
18 substantive business conversations?

19 A I do not have a count in mind.

20 Q More than zero, right?

21 A Correct.

22 Q Okay. And, by the way, have you seen e-mails
23 produced in this case, e-mails, that contain personal
24 messages like happy birthday to each other?

25 A If I did, I don't recall.

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1 Q Okay. Give me just a moment.

2 Okay. All right. When were you engaged to be an
3 expert witness in this matter?

4 A I don't recall the specific date, but it would
5 have been after the date of Professor Hochstetler October
6 report.

7 So after the -- I believe it was early October.

8 Q The report was early October or your engagement
9 was early October, or both?

10 A So both. So my retention was after the
11 disclosure, but I don't recall a specific date, but I was
12 not involved before October.

13 Q I'm going to hand you what I'm marking as Exhibit
14 16. I believe it will look familiar to you.

15 Can you tell me what Exhibit 16 is?

16 A It appears to be a copy of my professional CV as
17 of November of 2024, which I assume it's the copy of my
18 Schedule 1 to the report that I've provided.

19 Q I believe so. I think we -- I'm just checking to
20 make sure we actually copied your Schedule 1.

21 And, yes, it is a copy for Schedule 1.

22 So this is your resumé or CV, right?

23 A Correct.

24 Q And one of the things you list here is your --
25 starting on page 3, your expert witness testimony and

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1 submissions --

2 A Yes.

3 Q -- to this list?

4 A Yes.

5 Q And it goes on for pages, and it ends with a
6 deposition in 2014, the last entry, right?

7 A Correct.

8 Q Is that because you gave a list of your expert
9 witness testimony submissions for the last 10 years or is
10 that all the witness testimony you've ever given?

11 A This is a complete listing of witness testimony.

12 Q Okay. So when I counted the number of times
13 you've testified or given testimony, I've come up with over
14 40; does that sound right?

15 A I'll take your word for it. It sounds about
16 right.

17 Q Okay. This list includes every time you've
18 testified or submitted an expert report, even if you didn't
19 testify, or the only times you've testified?

20 A Yeah. It includes expert reports that would have
21 been served on the other side and that would have given them
22 an opportunity to at least depose me, but in certain cases,
23 the party might choose not to depose me for some reason, but
24 there would be a disclosure to the other side and the Court.

25 Q So these 40-odd expert witness testimonies do not

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1 include every time you've been an expert witness, you know,
2 engaged in, say, being a consultant or something for parties
3 in litigation, right?

4 A That's correct.

5 Q And I won't ask you any times you've -- to name
6 anyone you've been a consultant for absent litigation, I
7 don't want to violate any of your consulting agreements.

8 I just want to say, what percentage of the times
9 are you engaged -- and it can be approximate, as a
10 consultant, does -- or an expert, does that actually result
11 in an expert witness report or a submission that would have
12 made your CV?

13 A So I don't have the exact percentage distribution
14 in mind, but with respect to my work since 2014, when I was
15 first asked to serve as an expert witness in litigation,
16 maybe 85, 90 percent of the time would be my -- my guess,
17 over the course of these years.

18 Q And then the other 10 or 15 percent of the time
19 would be things like you were drafting an expert report and
20 they settled or they decided not to submit your report or
21 something like that; is that right?

22 A That would be one example. Just purely consulting
23 work would be another example, where there simply wouldn't
24 be an opportunity to disclose anything to anyone.

25 Q What part of your practice, since 2014, is that

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1 purely consulting work, where there was never -- you were
2 never going to write an expert report for the Court or the
3 other side?

4 A My best guess would be about 10 percent of the
5 hours I spend professionally. So, you know, a few hundred
6 hours a year.

7 Q So 90 percent of your work since 2014 has been
8 being an expert witness and generating expert witness
9 reports and testifying and that sort of thing, right?

10 MR. MCCALLUM: Object to the form.

11 THE WITNESS: Well, as part of my main
12 employment, that's correct.

13 As part of the consulting firms I've been
14 employed by, that's certainly the case.

15 BY MR. COLLIER:

16 Q Okay. What -- just so I know what main employment
17 means.

18 What's your non-main employment?

19 A So, for example, various, you know, teaching
20 engagements and things of that nature.

21 But the primary source, meaning, you know,
22 someone -- the type of employment where I spend, say, you
23 know, two, three thousand hours a year, that would be in the
24 context of consulting work.

25 Q I hope it's not 3,000 hours a year. That's a lot

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1 of hours.

2 A Occasionally, it is, but I enjoy what I do, so I
3 don't complain.

4 Q All right. We'll do -- this is going to be fast.
5 And then we'll -- do you want to do a fast one and
6 then we'll get some lunch?

7 A Sure.

8 Q That will be a good stopping point.

9 In Exhibit 15 -- and you can spend as long as you
10 want looking at it.

11 The only question I have for you -- Exhibit 15 is
12 GOOG-AT-MDL-B7884309 to 4325.

13 MR. MCCALLUM: Counsel, I think it's
14 Exhibit 16.

15 MR. COLLIER: Did I -- okay. 16.

16 THE WITNESS: Actually, 16 was my CV.

17 MR. COLLIER: So 17. Okay. I don't have my
18 stickers.

19 All right. Exhibit 17. Oh, yeah, thank you.

20 I'll put the right exhibit on there.

21 BY MR. COLLIER:

22 Q Again, I told you it would be an easy question.

23 This is just an example of non-substantive
24 personal communications, Halloween photos and stuff, right,
25 that is on an e-mail?

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1 A It does appear like a communication initiated for
2 an e-mail, whether it's also a group message, what gives me
3 a pause is the -- one of the addresses on the cc, the one
4 that starts with "[REDACTED] So, [REDACTED], all auto.

5 Q Uh-huh.

6 A Which may suggest that this is also posted. But
7 generally, I haven't read every single page, but just
8 flipping through, it does appear to be a communication,
9 including through e-mails, that involves personal in nature
10 pictures.

11 Q So if this e-mail -- you know what, we'll go to
12 lunch.

13 THE VIDEOGRAPHER: The time right now is
14 12:57 p.m. We are off the record.

15 (Recess taken at 12:57 p.m.)

16 THE VIDEOGRAPHER: The time right now is
17 1:55 p.m. We are back on the record.

18 BY MR. COLLIER:

19 Q Mr. Malkiewicz, were you able to get some lunch
20 over the break?

21 A Yes.

22 Q Okay. Good. Are you ready to proceed?

23 A I am.

24 Q All right. We were looking at your resumé, or CV.
25 If you could go back to that, or just have it handy. You

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1 may not need it to answer these questions.

2 I believe you said earlier today, but I want to
3 make sure now that we're looking at your CV, you've never
4 given any expert testimony on eDiscovery issues, have you?

5 A That's correct. Not specific to eDiscovery
6 issues.

7 Q Or spoliation?

8 A Not in the context that you're using the word I
9 understand.

10 Q Well, then, in what context?

11 A In the context of economics, there's a concept of
12 market spoliation.

13 Q Okay.

14 A That sometimes comes up, and I have testified in
15 cases where there are allegations of market spoliation.

16 Q Thank you for the clarification.

17 So you haven't -- you haven't been engaged as an
18 expert on discovery spoliation, correct?

19 A Correct.

20 Q Or the requirements for preservation?

21 A Correct.

22 Q And you're not an expert in the Sedona conference,
23 are you?

24 A Not specifically an expert in the Sedona
25 conference, but the Sedona conference working groups

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1 generally is something I'm generally familiar with and
2 reference -- and have referenced, at least for a good almost
3 a decade in my work.

4 There is different, you know, standards and
5 procedures, occasionally related to discovery, but more so,
6 you know, other topics that the Sedona conference generally
7 covers.

8 Q Like what would be -- other topics be?

9 A The ones that I come across most often relate to
10 trade secret protections. Also, standards for damages types
11 of analyses, in particular, intellectual property. They
12 have pretty well-developed standards, I believe may be
13 working group 12, that's -- those publications.

14 So generally, it's -- it's, you know, a nonprofit
15 that I'm familiar with and follow their -- their
16 publications.

17 Q Yeah. And I had gotten about, they talk about
18 damages types on things, so let me ask a better question.

19 You're not an expert on the Sedona conference
20 principles, even though you can read them and cite them,
21 right?

22 A Correct. I use those as a -- similar to the way I
23 use a learned treatise, so to speak, so I don't have an
24 opinion about those. I use them as a reference material.

25 Q Okay. Your hourly rate for this matter is \$975?

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1 A That's correct. That's what CRA charges my time
2 at.

3 Q Does that go up for 2025?

4 A I'm not sure. I don't know. I haven't been
5 informed that it would, but it's possible.

6 Q How many total hours have you worked on this case?

7 A I don't have a specific number, probably between
8 maybe 80 to 100 would be my best guess.

9 Q And is that all your time or are you including
10 anyone on your team?

11 A No, just my time. I understood you were asking
12 about my work, yeah.

13 Q Are there others who are helping you?

14 A Yes.

15 Q Do you know the total hours that your team has
16 spent on this case?

17 A I do not.

18 Q So the Epic log file that we've talked about
19 earlier today, it's talked about in your report, is that an
20 application log or a system log?

21 A My understanding, it's a system log.

22 Q What is the difference between an application and
23 a system log?

24 A I mean, I can only speak to it as a nontechnical
25 expert. So my general understanding is that it's where the

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1 log itself sits and collects the data, so it's -- the log at
2 issue in this case was not part of the Google Chat itself.
3 It was a -- it was a log that was developed to collect
4 information, both on front end and back end for debugging
5 purposes.

6 So it was a -- it was built on top of the existing
7 application.

8 Q And this -- this log, Google still runs that log
9 today, don't they?

10 A I am not sure which log Google runs today, whether
11 there are any changes or developments. I do not have that
12 information.

13 Q Well, the Epic log had five custodians, right?

14 MR. MCCALLUM: Object to the form.

15 BY MR. COLLIER:

16 Q The Epic log that you reviewed had five people
17 tracked in that log, right?

18 A That's correct, yes.

19 Q And how many custodians did you say were in this
20 case?

21 A Well, it depends on the way we define custodians,
22 but a few hundred.

23 Q Okay. Did you review Google's log for the few
24 hundred custodians, at least as it existed when you were
25 engaged?

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1 A I did not, no.

2 Q Why?

3 A It was not part of my assignment, I guess. It was
4 not something I was provided.

5 Q If we viewed Google's log for the custodians in
6 this case, would you agree with me that that would give some
7 information as to whether or not the few hundred custodians
8 in this case switched history on or off, at least to the
9 extent that that log could cover a period prior to
10 February of 2023?

11 MR. MCCALLUM: Object to the form.

12 THE WITNESS: So, just to be clear.

13 My understanding is that the five custodians
14 are custodians in this case as well, meaning the -- the
15 underlying litigation that we've read -- the caption
16 being read off at the beginning.

17 So if you're asking had we had a log about
18 more custodians that are also subject here, would it
19 inform us about those custodians on and off switching
20 history, sure, I mean, it would.

21 BY MR. COLLIER:

22 Q So when you were engaged, did you make any attempt
23 to figure out the availability of these logs, other than the
24 Epic log?

25 MR. MCCALLUM: Well, I'll object on privilege

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1 grounds and caution the witness not to disclose the
2 content of any attorney-client communications.

3 THE WITNESS: Not specifically, other than
4 asking for a complete set of logs that Professor
5 Hochstetler has analyzed, and the custodians that he
6 made references to, and I understand I was provided
7 whatever was available, that's my understanding.

8 BY MR. COLLIER:

9 Q Do you have an understanding of whether or not
10 Google still maintains this data debugging log today, not
11 the Epic log, the current version of the log?

12 MR. MCCALLUM: Same objection and same
13 instruction to the witness.

14 THE WITNESS: I do not know.

15 BY MR. COLLIER:

16 Q If we had a version of the log that had the other
17 custodian other than this five, would that make it easier
18 for you to figure out, again, pre-2023, February 2023, how
19 each of those custodians either turned on or off their
20 history?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: I'm trying to like read into
23 your question. I mean, if you're asking had I had the
24 same exact log but for additional custodians?

25 MR. COLLIER: Yes.

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1 THE WITNESS: Could I even use the same code
2 I've written or that Professor Hochstetler has written
3 to provide same information about additional
4 custodians, my guess would be yes, but I wouldn't know
5 until I see that particular data.

6 BY MR. COLLIER:

7 Q And how it's formatted and such; kept, formatted,
8 retained?

9 A Correct. Yes.

10 Q Okay. When we're trying to determine whether
11 Google employees turn history on or off prior to February of
12 2023, is there any more probative or better information
13 that's available to you, other than the Epic log, which you
14 looked at, and the depositions, which you looked at, is
15 there anything else that exists?

16 MR. MCCALLUM: Object to the form.

17 THE WITNESS: The one thing that comes to
18 mind, which I believe we've spoke to some extent
19 indirectly because you've pointed me to a number of
20 exhibits from actual chats that had Bates stamps
21 labeled from, I believe the Virginia litigation. So
22 that's the kind of set of information that, you know,
23 I've also looked into because that set of information,
24 I understand specifically focused on, you know, sort of
25 history on and off and the terms that I've included in

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1 Schedule 3 to my expert report, but that would be the
2 only additional caveat I would say, that on that
3 particular topic, those documents that I've reviewed
4 may also provide some color.

5 BY MR. COLLIER:

6 Q And you know, Mr. Hochstetler looked at the
7 Virginia litigation documents, too, right? Or do you know
8 that?

9 A Yes. I mean, there's some included on his
10 materials relied upon list.

11 Q So what I'm trying to ask, and I'm doing it in a
12 very poor way, so hopefully I'll get luckier when I
13 reformulate this question, is: You looked at the Epic log,
14 you did some analysis to the Epic log, you looked at
15 deposition testimony in this case as what people self-report
16 on litigation on and off, and we looked at some chats today,
17 and you looked at the ED, the Eastern District of Virginia
18 litigation, right? Just -- are you with me so far?

19 A Yes --

20 Q You've looked at all that?

21 A -- I'm with you, yes.

22 Q And Professor Hochstetler has looked at those
23 things, for example, you're aware of that.

24 And what I'm asking is, is there anything else in
25 the universe of information that exists that you think you

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1 should have looked at, or Professor Hochstetler should have
2 looked at, or is it, no, everyone's looked at everything
3 that's available, I just disagree on how you interpret it?

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: The one -- the part of one
6 other type, in a set of documents that I've looked at
7 that, you know, you've shown one to me was one of the
8 policies that Google has had, so I looked at a number
9 of those, in particular, in conjunction with the
10 deposition testimony.

11 So specifically the ones that instructed
12 Googlers to not discuss certain things in chat because
13 there's no way to keep those.

14 So there'll be a set of documents I have
15 reviewed and cite them in the background section that
16 also informs my interpretation of various factual
17 statements that deponents make.

18 And when I analyzed the actual chat log, I
19 believe that's not something that Professor
20 Hochstetler, at least at the time of his initial
21 October 4th disclosure has looked at, but that would be
22 the -- as I sit here without, you know, going over my
23 full report, that's -- that's for now what I can think
24 to add it to the categories you've referenced.
25

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1 BY MR. COLLIER:

2 Q Were you aware that Professor Hochstetler was
3 deposed yesterday?

4 A I -- I was aware that his deposition was
5 yesterday. I'm not -- I don't know anything about his
6 testimony though.

7 Q Okay. Did you see Professor Hochstetler's reply
8 report in this litigation?

9 A I -- well, I have read through a report and a
10 declaration that I believe was dated as of last week
11 sometime, so I have looked at a couple of the documents
12 authored by Professor Hochstetler.

13 Q And have you seen that Professor Hochstetler says
14 he has reviewed the chat retention policy and the litigation
15 holds?

16 A I just don't recall as I sit here, but if you tell
17 me that that's what it says, I have no reason to believe
18 it's not true.

19 Q Okay. So, what I'm trying to get to is, it seems
20 to make -- I'm not trying to put words in your mouth, I'm
21 trying to move on to something else if I'm right, and if I'm
22 not right, I want to find out why.

23 That you and Professor Hochstetler, if you assume
24 he's reviewed the -- just assume he's reviewed the chat
25 retention policy and litigation holds, that you're in

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1 agreement, both of you have reviewed, as far as you know,
2 all the information available to reach whatever conclusions
3 each of you has reached as to history on and off, at least
4 prior to February of 2023; is that fair?

5 And I guess to supplement my question, is there
6 something else that you think you needed to review to reach
7 your opinions.

8 A Well, so there's certainly no additional
9 information that I needed to review to analyze and provide
10 my opinions of Professor Hochstetler's work. Whether there
11 is some information that Professor Hochstetler should have,
12 could have, asked for, that's not something that I took upon
13 myself, that was not part of my work in this case.

14 I literally looked at Professor Hochstetler's
15 October 4 disclosure, and I analyzed whether the conclusions
16 he's reached, based on the work that he's disclosed at the
17 time, are reliable to a professional degree of certainty.

18 Q Right. I understand your disagreement as to
19 conclusions, but kind of remember when I asked you to look
20 at his programming language and it did what it purported to
21 do.

22 I'm simply saying, do you have any criticisms of
23 Professor Hochstetler, and if you have none because it's
24 outside your scope, that's fine too, but do you have any
25 criticisms of Professor Hochstetler that he should have

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1 reviewed other data?

2 A I don't know. I mean, I haven't taken my -- I
3 haven't analyzed that particular question. I only can tell
4 you that within the context of the data that he has
5 reviewed, my understanding is, I mean, not understanding, my
6 opinion is that he cannot scientifically offer the
7 conclusions he has offered within a reasonable degree of
8 professional certainty.

9 Q Are you an expert statistician?

10 A I am, yes.

11 Q You've testified on statistical measures?

12 A I have, yes.

13 Q And did you -- you didn't put in your report any
14 attempts to run confidence intervals or statistical
15 significance on what Professor Hochstetler did, right?

16 A Correct. I have not done so.

17 Q So just to be clear. You haven't done the
18 mathematics that one would do to determine the statistical
19 significance of Dr. Hostetler's conclusion, correct?

20 A Right. It would be inappropriate to do at the
21 level of analysis that Professor Hochstetler has conducted.

22 Q By the way, what format is the log file in, the
23 Epic log file?

24 A The specific output that I've reviewed was logged
25 into a CSV file, or common delimited file.

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1 Q Right. You anticipated my next question. I don't
2 think the court reporter got that exactly right.

3 What does CSV stand for? If you don't know,
4 that's okay. I'm not trying to trick you.

5 A No. I'm trying to recall actually, because I
6 haven't thought about the actual file extension. I've done
7 CSV for some time now.

8 I -- I -- we typically refer to in jargon as a
9 common delimited file, but obviously those first letters
10 don't fit into CSV, so.

11 Q Okay. But a CSV is a common -- a common
12 electronic file, right?

13 A It is fairly common, yes.

14 Q So we talked earlier this morning about -- there
15 was Google Hangouts and then it turned into Google Chats.

16 Do you recall that?

17 A I recall the general discussion, I mean, in fact,
18 there was another tool even before Google Hangouts, but,
19 yes, I generally recall we discussed it this morning.

20 Q You've got a good read on me because you already
21 knew what my next question was going to be.

22 What was the tool before Google Hangouts called?

23 Maybe I can help you. Was it G Talk?

24 A Yes. It was a G Talk tool.

25 Q Are you aware of when G Talk was used at Google

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1 versus, say, Google Hangouts?

2 A I, to the best of my recollection, G Talk was
3 phased out somewhere towards the end of 2014 and beginning
4 of 2015. So there was a transition period where both
5 Hangouts and the G Talk were maybe available for a period of
6 time, but my best recollection, that's roughly the time
7 frame.

8 Q And do you recall what Google used before G Talk?

9 A I do not recall specifically. I -- I -- I believe
10 I have like a paragraph or two about the general history in
11 my expert report, but I just don't recall from memory as I
12 sit here.

13 Q As I've looked at these programs, I don't believe
14 that there's anything about the differences between G Talk,
15 Google Hangouts, and Google Chat, that bear in any way on
16 whether it goes to the Vault or history on or off, is
17 that -- is that consistent with your understanding, or is
18 there something peculiar to any of these programs I should
19 know about?

20 A I don't know. I'm the wrong person to ask. I --
21 I do not know the technical differences going as far back.

22 Q Well, what about the technical differences, if
23 any, that determined whether the underlying chats or
24 messages were retained, do you know?

25 A I do not recall. I didn't focus on those years,

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1 because in Professor Hochstetler's report the focus is more
2 on the 2022 time frame. So that's what the focus, even of
3 my background and understanding was, so I -- I just don't
4 know and definitely don't recall, but I don't believe I even
5 know.

6 Q Okay. Are you aware that there was a web version
7 of Google Chat?

8 A It sounds familiar, but I'm also not
9 particularly -- do not recall the specifics.

10 Q Are you aware there was a desktop version of
11 Google Chat?

12 A If -- if we're talking about a time frame of, you
13 know, roughly 2014 or around that time, I believe I've seen
14 references to it.

15 But again, it wasn't a focus of my work in this
16 case.

17 Q All right. I want to just ask a couple more
18 questions on this, I think I know your answers, but I've got
19 to ask to do my job.

20 Are you aware that there was a mobile version of
21 Google chat?

22 A It does not surprise me, but I don't have a
23 specific recollection of looking at anything about it.

24 Q Do you have any understanding as to whether the
25 Google employees used the web version, the desktop version,

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1 or the mobile version of Google Chats, or all of them or
2 some of them?

3 A I do not have a specific understanding.

4 Q And, I'm sorry. I have to ask these questions. I
5 think I know your answers, and I apologize.

6 Can you tell for me any differences between the
7 various versions of Google Chats; web, mobile, desktop?

8 A I couldn't, you know, speculate.

9 Q I'll try to consolidate all of these questions
10 into one. Let's see if it works.

11 Is it fair to say that you don't know the
12 differences between the user interfaces of web, mobile, or
13 the desktop versions of Google Chat?

14 A Yeah. That's not something I specifically looked
15 at or analyzed.

16 Q And -- and the same question, but now asking about
17 time periods.

18 Is it fair to say that you don't know the
19 differences between the Google Chat programs and all of its
20 flavors in different years; such as 2007, 2008, 2013, 2015,
21 2019, 2022, like you couldn't describe for me any of those
22 differences?

23 A Yes. Most certainly not going back to this 2007,
24 '13. I have some background and understanding that I
25 focused in describing in my report as to the -- the way, you

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1 know, Google has used the chat tool and some functionality,
2 as well as the user interface aspects of it, but only to the
3 extent that, you know, the depositions that, for example,
4 you've taken are contemporaneous with these tools, but I
5 haven't independently analyzed the tools themselves, so I
6 couldn't tell you the differences.

7 Q Okay. When I looked at your CV, I didn't see that
8 you had published any papers on statistics.

9 Have you published on statistics?

10 A Not specifically. I mean, I've presented on
11 statistical concepts. That is one of the main tools that I
12 use in, especially in like survey research work, but I
13 haven't published specifically in terms of like a
14 peer-reviewed journal.

15 Q And in your survey work, you're using a SAS-based
16 program to analyze the results and how well they're
17 statistically powered; is that fair?

18 A It depends. I mean, SAS is definitely one of the
19 tools I've probably spent most of my career with, in terms
20 of actual hands-on coding, but I've used other tools. I've
21 used Python and R and SPSS. So all those other software
22 packages.

23 There's some other specialized tools for, you
24 know, other types of statistical analysis, too, I've used.
25 So, Stata, for example, comes to mind, depending on the

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1 types of standard errors I'm trying to evaluate. Some tools
2 have built-in modules.

3 So, yeah, it really depends, but SAS was probably,
4 you know, in the course of my, say, 20-some years working
5 with statistical packages, SAS is probably, I'd say half of
6 the time I would use SAS.

7 Q And SAS, do you recall what it stands for?

8 A Well, it's the name of the company, too, that
9 actually outputs the software, but I don't think I -- I
10 haven't read about what the acronym stood for originally for
11 a long time, so I would speculate at this point.

12 Like maybe statistical analysis software. Maybe
13 that's -- that would be my guess.

14 Q Okay. And SAS, for the court reporter, is it
15 S-A-S-S or S-A-S?

16 A Just S-A-S.

17 Q Okay. And your SAS program, you can input a CSV
18 file, right?

19 A You could import a CSV file into SAS, correct.

20 Q So you could have taken the Epic log and analyzed
21 it in the SAS tool, right, as a mechanical matter?

22 A Yes.

23 Q And my using of SAS was a long time ago before I
24 got to be a lawyer, but as I recall, it's pretty quick,
25 right? You upload the file, you tell it what output you're

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1 looking for, and it comes back to you in seconds basically?

2 A Sure. So here we're talking about a dataset of
3 roughly 300-some thousand observations, so, yeah, with the
4 modern computing infrastructure, that would be a matter of
5 seconds, most of the queries, at least.

6 Q And an observation, when we think about it in
7 statistics, would sometimes be called a N, a little N?

8 A Sure. I mean, we can define it however, but,
9 yeah, a little N is familiar.

10 Q So as we sit here today, under oath, you're not
11 able to tell me whether or not 300,000 observations gives
12 you enough statistical power at a 95 percent confidence
13 level, let's say, to reach conclusions, are you?

14 A The question, in and of itself, doesn't make
15 particular sense to me. It depends on conclusions about
16 what, and what is the question?

17 Q Depends on conclusions about what. What do you
18 mean "conclusions about what?" Can you help me? I'm not
19 trying to ask misleading questions, I'm just not a
20 statistician.

21 A So statistical significance applies to a
22 hypothesis that one is testing. So what is the hypothesis
23 that I'm asked to hypothetically test, given the log
24 datasets, so I would need to know that at least as a first
25 step to be able to try to answer the question as to whether

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1 that dataset itself is sufficient to answer the question of
2 statistical significance and whether there will be a
3 meaningful question to ask.

4 Q So if the question you're trying to answer is
5 whether or not employees turned history on or off with your
6 300,000 observations, that you have not tested to see if the
7 Epic log would give you enough statistical significance to
8 reach that conclusion?

9 MR. MCCALLUM: Object to the form.

10 THE WITNESS: I mean, again, I'm trying to
11 guess as to exactly what you're asking, because the
12 question as posed doesn't make a lot of sense to me.

13 Because I believe I'm very clear in my report
14 that with respect to the five employees over a 68-day
15 period, I believe both Professor Hochstetler and I have
16 close to a perfect certainty on the pattern of
17 switching on and off for those five employees in
18 particular with a little of uncertainty caveat that
19 doesn't come from statistics, but comes from deficiency
20 in the log itself.

21 So the set of the -- the non-responds bias,
22 so to speak, but that's -- that's less related to the
23 statistical significance, more to simply the slight
24 deficiency in the log itself because it wasn't designed
25 for that purpose.

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1 So Professor Hochstetler notices that the
2 overlapping log and the messages that were produced in
3 context don't always match exactly. He also notes that
4 the received messages are being logged into the CSV
5 file, sometimes multiple times, so there's some small
6 uncertainty there, but putting those little
7 uncertainties aside, both Professor Hochstetler and I
8 agree that in the context of 68 days for these five
9 particular custodians, we're both relatively certain
10 about the outcome of our on and off analysis.

11 BY MR. COLLIER:

12 Q I understand that. Where you and Professor
13 Hochstetler part ways is his extrapolating from the five
14 employees to a larger group, say, 202 employees, or whatever
15 the custodian amount is, because I know it fluctuates all
16 the time.

17 Isn't that kind of a fair summary?

18 A That's correct.

19 Q And by the way, I said 202 employees because I
20 believe you reference that in your report, because Professor
21 Hochstetler had said 141 employees, right?

22 A Yes. I believe he started, and he actually cited
23 to a document, that was one of the letters, and I believe
24 that's where he took the number from, that's my
25 understanding.

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1 Q And then where did you get 202 from?

2 A I asked counsel whether that is a true number and
3 whether there are other custodians given that now there's
4 more information produced from other litigations, so whether
5 that increased the number of custodians from which data and
6 chats in particular were produced in this case, and I was
7 informed that.

8 MR. MCCALLUM: I'll just object there and
9 caution the witness not to disclose the substance of
10 any communications that counsel made to you.

11 THE WITNESS: Well, just that there were
12 more. There were data produced from our custodians and
13 that added up to 2002, and that's the foundation for
14 the 202 in my report.

15 BY MR. COLLIER:

16 Q And I want to be careful because I don't want to
17 invade your conversation with counsel, so I'm going to ask
18 this question as precisely as I can, and pause before you
19 answer in case Mr. McCallum thinks I don't get it right,
20 because I'm not trying to -- you believe Professor
21 Hochstetler, when he says 141 employees, was wrong, and it's
22 actually -- and I'll say approximately, approximately 202
23 employees or 202 custodians; is that fair?

24 A Correct. Irrespective of the time period for
25 which those individuals were, in fact, custodians. Meaning,

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1 because there's a, you know, not all of these 141 or 202
2 were custodians as of the time period of the log. Not to
3 mention the time period which then Professor Hochstetler
4 applies the analysis to.

5 Q Okay. With that caveat, Professor Hochstetler
6 points to a document from Google to support his 141.

7 Without telling me any communications with
8 counsel, can you point me to a document or something
9 published in this case that supports 202 custodians?

10 A So just to make it clear. I have not seen a
11 document from Google. I've seen a legal letter from
12 Google's counsel to, I believe, one of your colleagues,
13 maybe even you're an addressee as well.

14 So there's a legal communication that Professor
15 Hochstetler, I believe, cites to.

16 Q Okay.

17 A And so my understanding of the 202 also comes from
18 counsel, in particular, you know, attorneys who have drafted
19 that letter that Professor Hochstetler has relied upon.

20 Q Okay. I'm trying -- I want to be very careful
21 with your counsel's privilege, that's -- I'm pausing for a
22 moment because it is never my intention to accidentally make
23 you say anything you shouldn't.

24 I think that's all I can ask you on that.

25 What effect does -- okay, economists always make

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1 fun of me, so you're free to laugh, too, when I say this
2 Latin, because I say it Texan.

3 Ceteris paribus, all other things being equal,
4 right, standard economist assumption. What effect does
5 changing the number of custodians from 141 to 202 do to the
6 underlying conclusion by Professor Hochstetler as to the
7 amount of messages that weren't retained, directionally?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: Well, in my opinion, it
10 compounds the errors that Professor Hochstetler has
11 embedded into his extrapolation analysis.

12 BY MR. COLLIER:

13 Q Please explain.

14 A So, I mean, I go at length in my report to discuss
15 specifically, for example, the roles of the five custodians
16 for which the log dataset has been analyzed by Professor
17 Hochstetler.

18 One of the custodians that Professor Hochstetler
19 analyzes is the CEO of Google. Another custodian is [REDACTED]
[REDACTED]. With the titles as such, there
21 is only one individual and has only always been one
22 individual with that title and that role at Google.

23 So by multiplying these -- the histories of those
24 unique individuals, more times, the errors associated with
25 treating those individuals as not unique, compound.

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1 Q Can you tell me why the histories of those unique
2 individuals not being treated as unique affect the outcome?
3 If I'm understanding what you said correctly, and I may not
4 be.

5 A Well, one simple way to think about it is, in
6 particular in the context of the CEO, because I have looked
7 at the deposition of Mr. Pichai. His both role and
8 communication patterns, and level of involvement in depth
9 and various types of businesses at Google, are unique
10 because they're attached to a role of a chief executive
11 officer.

12 So if one were to use his particular pattern and
13 assume that it's the same as everybody else at Google who
14 would be relevant, and you do it more times than you did
15 previously, that compounds the error rate for that
16 particular individual.

17 And of the five, [REDACTED]
18 [REDACTED], and as
19 Professor Hochstetler notices, has a unique pattern of
20 communicating.

21 And so, again, using that individual to
22 extrapolate into even more individuals outside of these
23 five, again, compounds the error. If you multiply it as in
24 Professor Hochstetler analysis by, you know, more times
25 than, say, 141.

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1 Q Are you aware that the Court has ordered in that
2 case that Sundar Pichai be deposed because he had relevant
3 knowledge, was that fact available to you?

4 A If the -- if the deposition notice was attached to
5 Mr. Pichai's deposition I would have skimmed through it. I
6 don't recall specifically seeing what Mr. Pichai and what he
7 was noted for, so I don't know.

8 Q Did you reach a conclusion in your expert report
9 that Mr. Pichai had no relevant chats at any time in the
10 period from wherever it started till today's date?

11 A Just to be clear, again, I'm hoping that I've been
12 clear all along.

13 I'm offering no opinions as to relevance. That's
14 not the area of my expertise.

15 I can tell you what the log dataset says, what
16 chats have been retained, what the history of off and on is,
17 what chats that have been retained after February 8th have
18 ultimately been produced in this case.

19 So that's the extent of my both expertise as it
20 applies to this. I cannot speak to relevance, that's
21 outside of my both role and expertise.

22 Q Did you reach a conclusion that there were no
23 chats of Mr. Pichai they were not retained?

24 A In the period after February 8th, that is my
25 understanding. The data that I've analyzed appears

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1 consistent with that.

2 Q Are you testifying under oath that -- when you say
3 "in the period after February 8th," you mean 2023?

4 A Correct.

5 Q So now I want to ask you prior to February 8th,
6 2023. It's not your opinion that Mr. Pichai -- you're not
7 testifying that Mr. Pichai did not send a chat that has not
8 been retained, is it? That's a lot of double negatives.
9 Let me ask you a better question. The double negatives are
10 hard. I'm going to do that.

11 Is it your opinion under oath that Mr. Pichai sent
12 Chat messages prior to 2023, but they were all retained and
13 collected by Vault?

14 A No. I'm very clear about it, and I have a summary
15 table in my report that in my understanding, and including
16 reviewing the log, the same exact policies we've discussed,
17 the retention policies, apply Mr. Pichai as they did to any
18 other employees, including those on litigation holds, which
19 I understand Mr. Pichai was one of those.

20 Q Right. While based on that, while we don't know
21 the number, can we agree that Mr. Pichai has been employed
22 at Google at all relevant times, I'll represent that to you.

23 Can we agree that Mr. Pichai sent some texts that
24 we disagree as to the -- some chats as we disagree as to the
25 number they were not retained and collected by Vault?

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1 MR. MCCALLUM: Object to the form.

2 THE WITNESS: Well, in the context of the log
3 dataset, we, as in -- I can tell, at least I can speak
4 for myself that I do know how many messages Mr. Pichai
5 has sent in the 68-day period, or let's say the period
6 from December 13th to February 8th.

7 So I do know the number that he sent and
8 received that were marked as ephemeral. I just don't
9 recall the number from the top of my head, but that
10 information is in the log datasets, so we know what the
11 number is.

12 BY MR. COLLIER:

13 Q Right. That's why -- I'm trying not to quibble
14 with you, sir, about how many, because I know how many chats
15 were not retained is actually a central disagreement between
16 you and Professor Hochstetler, like you don't agree with his
17 extrapolation from the five to the 202, right?

18 A Correct. But not with respect to Mr. Pichai,
19 within the context of the 68-day period; I believe we're
20 pretty much in agreement for that particular period for that
21 particular individual.

22 Q Right. But the 68-day period tells you that
23 Sundar Pichai sent chats, right?

24 A Correct.

25 Q And we know if Sundar Pichai sent chats prior to

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1 February of 2023 and history was not on, those chats were
2 not retained by Google, right?

3 A Correct.

4 Q And that same -- I want to ask that same question
5 about every Google employee that could be involved and have
6 relevant documents, even though I'm not asking what's
7 relevant.

8 We know that the Google employees, who sent chats
9 prior to February of 2023 and the history was not on, it was
10 off, those chats were not retained by Google, right, unless
11 someone went in and specially turned on the switch?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: Correct. With the caveats that
14 we discussed, but I believe I follow your statement.

15 BY MR. COLLIER:

16 Q Okay. So Mr. Hochstetler has reached various
17 opinions about the number of chats that were not retained by
18 Google in this case, and you've seen them, right, he did
19 actually for 2022?

20 A Right. I believe 2022 -- initially, I think it
21 was about 1.5 million, if I recall roughly, what Professor
22 Hochstetler has put forward.

23 Q And I think that number bounces around depending
24 on various assumptions, right?

25 I know you don't believe that there's evidence

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1 that 1.5 million chats were not retained by Google.

2 Do you have affirmative testimony on how many
3 chats were not retained by Google in 2022?

4 A I do not.

5 Q Can you testify under oath how many chats were not
6 retained by Google in 2021, of, we'll say, the custodians in
7 this case?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: Same answer. I can only speak
10 to the -- to the five custodians for which we do have
11 information for.

12 BY MR. COLLIER:

13 Q And I'm sorry, I got to ask you one more wrap-up
14 question, even though I know your answer, just so I can get
15 it in the record.

16 You can't testify under oath how many chats were
17 not retained by Google from, we'll say 2007, to the end of
18 2022, because the history was off, correct?

19 MR. MCCALLUM: Object to the form.

20 THE WITNESS: Correct. That's not the
21 analysis I've conducted or have been asked to conduct.
22 And I disagree that the methodology that Professor
23 Hochstetler has put forward can be used for that
24 purpose.
25

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1 BY MR. COLLIER:

2 Q I understand your disagreement. I'm trying to
3 figure out if you have an affirmative opinion.

4 Now, we can agree, whatever that number is, you
5 know there were some chats not retained by Google from 2007
6 until the end of 2022, the way the system was set up, right?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: Yes. In the context of what
9 we've been discussing, yes, I believe we've established
10 that.

11 BY MR. COLLIER:

12 Q Cub any more specific than there were some, you
13 know, it's not zero?

14 A Well, I just want to be sure I understand.
15 What -- what is it exactly that you're asking me to admit
16 that it's not zero?

17 Q The number of chats sent prior to 2023. So 2022
18 backwards, to 2009.

19 How many chats were sent with history off by
20 custodians in this case that were not retained?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: If you're asking me about any
23 chats, it does appear that the number is greater than
24 zero.

25 I do not know what the number is, or I do not

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1 have an affirmative opinion as to what the number is.

2 BY MR. COLLIER:

3 Q Okay. How many chats, if you have an opinion, how
4 many chats would have to be spoliated before a company
5 should be punished for not retaining the chats?

6 MR. MCCALLUM: Object to the form.

7 THE WITNESS: I'm not sure I -- could you
8 explain to me the -- what do you mean by "spoliated,"
9 because we haven't really used the term in the context
10 of discussion so far, so I just want to make sure I
11 understand.

12 BY MR. COLLIER:

13 Q Well, I'm not using the economic market
14 spoliation. I'm saying spoliation, like you can think of in
15 like eggs, you know, after a certain period eggs are no
16 good, they're spoliated, they have to be thrown out. Maybe
17 that's not the best example, but -- I'll tell you what, let
18 me ask it without using the word "spoliated."

19 How many chats by a Google custodian -- by a
20 company's custodians would a company have to fail to
21 maintain or put in their vault before they should be
22 punished for not doing so?

23 MR. MCCALLUM: Object to the form.

24 THE WITNESS: I -- I don't know.

25

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1 BY MR. COLLIER:

2 Q That's a legal issue?

3 A I actually don't even know that. I don't know.

4 There are regulations, there are precedence, or if
5 it is a legal issue or if it's a fact-finder issue, I
6 actually don't know.

7 Q Okay. And you're certainly not issuing an opinion
8 on that particular fact?

9 A Yes, I'm not.

10 Q By the way, did you look at Mr. Ignatius Grande's
11 rebuttal expert report in this matter?

12 A I have seen two, I believe, documents from Mr.
13 Grande last week. Also, one declaration and one -- I think
14 it was titled an expert report, so I know there were --
15 frankly, I spend more time with Professor Hochstetler's
16 documents, but I have seen Mr. Grande's disclosures.

17 Q Well, and you're probably anticipating where I'm
18 going.

19 You understand Mr. Grande's a lawyer, right? Or
20 maybe you don't. Do you know if he's a lawyer?

21 A If you're representing me that he is, I would not
22 be surprised. But, yeah.

23 Q I'll represent to you he is a lawyer, but more --
24 more to the point. Given the subject of Mr. Grande's
25 declaration in his expert report on things such as

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1 preservation and industry standards and legal standards on
2 that, is it your intention to provide rebuttal testimony to
3 Mr. Grande's either declaration or his report?

4 A Not as I sit here.

5 Q When you read Mr. Grand's declaration or expert
6 report, did you go: "OMFG, that's wrong"?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: I certainly don't recall having
9 any strong reactions about it and certainly not of that
10 kind, so, no.

11 BY MR. COLLIER:

12 Q All right. We're removing the OMFG, because
13 that's now my new favorite acronym.

14 It's fair to say when you read Mr. Grande's
15 declaration or expert report, you didn't say: "I'm going to
16 rebut any of his conclusions under oath," because he's in a
17 different field than you, right?

18 A Well, I would characterize it a little
19 differently.

20 Q Okay.

21 A I typically don't focus on the field of the
22 person. I more focus on the actual opinions, so I -- I just
23 did not see relevant material to the opinions that I offer.

24 So I -- that's why I wouldn't be developing reply
25 opinions to that, at least as I sit here, and I wasn't --

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1 certainly asked to do any work on those, so I don't know,
2 but it's more in terms of the content, I have not studied
3 Mr. Grande's background, for example, so I don't know.

4 Q And that's fair enough on the content.

5 So let me ask my question in a way that hopefully
6 makes you a little more comfortable.

7 As you sit here today at your deposition, you've
8 looked at Mr. Grande's declaration, we'll start with that.

9 And there's nothing in Mr. Grande's declaration
10 you intend to provide sworn testimony to rebut, is there?

11 A Not as I sit here.

12 Q Same question as you sit here today at your
13 deposition, you've looked at Mr. Grande's -- it's called a
14 rebuttal expert report.

15 There's nothing in Mr. Grande's rebuttal expert
16 report you intend to provide sworn testimony to rebut, is
17 there?

18 MR. MCCALLUM: Object to the form.

19 THE WITNESS: Same answer. Not as I sit
20 here.

21 BY MR. COLLIER:

22 Q And thank you for being patient. I know some of
23 these questions are just annoying, but I have to figure out
24 what you're going to say at trial and not.

25 Do you have an opinion as to whether or not a

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1 litigation hold should clearly and unambiguously list the
2 types of materials that are subject to that hold?

3 A I do not have an opinion about that.

4 Q Do you have an opinion as to whether a litigation
5 hold should provide clear instructions as to how to handle
6 or preserve materials subject to the hold?

7 A I do not.

8 Q Do you have an opinion whether a litigation hold
9 should clearly state any de-structure or deletion of
10 relevant materials should immediately cease?

11 A Same. I do not.

12 Q How long have we been going? If you don't mind,
13 I'll do a couple more questions and then we'll take a break.

14 You are not issuing any opinion that any of the
15 plaintiffs' litigation holds or document preservation
16 schedules are insufficient, are you?

17 A Correct. I offer no opinion on that.

18 MR. COLLIER: This is probably a good time
19 for a break.

20 THE VIDEOGRAPHER: The time right now is
21 2:52 p.m. We are off the record.

22 (Recess taken at 2:52 p.m.)

23 THE VIDEOGRAPHER: The time right now is
24 3:18 p.m. We are back on the record.

25

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1 BY MR. COLLIER:

2 Q Mr. Malkiewicz, can you go back to your CV in this
3 matter? And I'm looking at page 9, which is your research
4 interests.

5 A Okay.

6 Q And you've got a lot of interests here, and I was
7 spending a little time earlier looking at the cases that
8 you've testified in.

9 It looked to me like your research interest would
10 be a fair summary of the things that you've rendered expert
11 opinions on before; is that fair? You want me to take them
12 one by one?

13 A No. I just want to make sure I understand your
14 question, so if you could repeat it.

15 Q Yeah, let me just ask it in a more straightforward
16 way.

17 Are you an expert in antitrust economics?

18 A Yes.

19 Q Are you an expert in applied econometrics and
20 statistics?

21 A Yes.

22 Q Are you an expert in corporate finance?

23 A Yes.

24 Q Are you an expert in health care and
25 bio/pharmaceutical economics?

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1 A Yes.

2 Q Are you an expert in intellectual property and
3 intangible assets valuation?

4 A Yes.

5 Q Are you an expert in marketing theory and
6 marketing analytics?

7 A Yes.

8 Q Are you an expert in international trade?

9 A Yes.

10 Q Are you an expert in labor economics?

11 A Yes.

12 Q Are you an expert in law and economics?

13 A That's more of a professional interest. I have
14 not offered opinions in that area. But that's something
15 that comes out of my work before consulting.

16 Q Got it.

17 And you're not a lawyer, so you don't purport to
18 be an expert in the law, right?

19 A Correct.

20 Q But you are an expert in economics?

21 A Correct.

22 Q Okay. I just want to make sure that's where you
23 were headed with that.

24 Are you an expert in the economics of
25 standardization and standard essential patents?

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1 A Yes.

2 Q And are you an expert in survey research methods?

3 A Yes.

4 Q Is there anything else not in that list that you
5 consider yourself an expert in?

6 A Not that I can think of. And just to be clear,
7 there's a lot of overlap between those areas.

8 Q Sure.

9 A At least in terms of the expertise I'm typically
10 asked to offer.

11 Q Okay. And then in your professional history, is
12 it fair to say that since 2006 you have worked for
13 Consulting Practices?

14 A Correct.

15 Q And can you tell me generally in a sentence or two
16 what your work -- and I'm sure as you become vice president,
17 it's changed from when you were just a senior associate, but
18 just very generally, what have you done since 2006 to the
19 present as a consultant?

20 A Generally, I applied my education and training in
21 economics, finance and statistics, to the applied -- so I
22 applied these sciences in the context of various consulting
23 projects with a particular focus on disputes and
24 investigations.

25 Q And you haven't worked in any non-consultant

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1 industry, have you?

2 A With the exception of teaching, and since 2006,
3 that's correct.

4 Q Okay. Since 2006, you've either been teaching or
5 a consultant, but you haven't been, say, working at
6 Microsoft or any Fortune 500 company?

7 A Correct. So all those engagements would be in a
8 consulting capacity through my primary employment as a
9 consultant.

10 Q Have you, prior to this litigation, done any
11 consulting for Google?

12 A I have not, no.

13 Q What about Google's counsel in this matter?

14 A I have not, no.

15 Q Do you know how you came to their attention?

16 A I do not.

17 Q And then prior to 2006, you had a couple years of
18 being a research assistant, one to a judge and one to a
19 professor, right?

20 A Correct.

21 Q And the -- the Honorable Posner, that was through
22 the school, right?

23 A So the payment for my work would come through the
24 law school at the University of Chicago, but the appointment
25 was to a joint group that was coordinated by Professor

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1 Posner at the time, in his role at the law school, as well
2 as it was sponsored by him sitting by designation, so he was
3 at the time on the Seventh Circuit Court of Appeals already,
4 but he would sit by designation on a lot of Northern
5 District of Illinois cases, so a lot of the funding came
6 through that work, so a lot of my projects were within the
7 context of him sitting by designation in, particular in
8 cases that involved issues of economics and statistics.

9 Q It says 2004 to 2004, how many months were you his
10 research assistant?

11 A That stipend was for about nine months.

12 Q Okay. And then your work for Professor Townsend,
13 is that sort of the same thing, in terms of how you got the
14 job and how it was funded?

15 A So it was a little different. That actually came
16 out of professor -- sorry, Judge Posner's recommendation, to
17 apply to the National Opinion Research Center, so a lot of
18 that work that I've done with Judge Posner related to
19 professional and economic standards of evidence within
20 district court litigations.

21 And so one of the areas of interest was, in
22 particular, using statistics as inference, and so
23 Professor -- so Judge Posner recommended that I apply to the
24 National Opinion Research Center, which at the time was, and
25 I believe still is, the larger nonpartisan statistical

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1 research organization in the United States, and so I got a
2 position with Professor Townsend, who right now is at MIT, I
3 believe.

4 Q And did you say one of your interests was, in
5 particular, using statistics as inference?

6 A Right. As a -- as a method of inference that
7 would apply to proceedings before district courts
8 specifically. So that was Professor Posner's -- Judge
9 Posner's interest and that's why he recommended, you know,
10 after my internship or after my position with him and his
11 group, you know, as an extension of that interest, you know,
12 he recommended that I apply to NORC.

13 Q And the only reason I asked about inference, is
14 the court reporter heard interest, so I wanted to make sure
15 it was statistics of inference.

16 A Inference, correct.

17 Q And can you just give me an example of -- well,
18 give me a hypothetical of using statistics as inference that
19 you -- so I'll understand the concept?

20 A So generally, at the very high level, what Judge
21 Posner was interested in is in a situation where there is
22 incredible, say, first account information or data, came
23 studies of subsamples, whether of data or populations,
24 whether their questioners or objectively collected data can
25 be used with scientific rigor that would, then in his mind,

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1 compare to the rigor of, say, direct witness testimony, for
2 example.

3 And so what does the science of statistic teach
4 versus what is typically available, used. In his practice,
5 as a judge, that he sees being, you know, offered as
6 evidence in court cases.

7 One of -- so that's not hypothetical, it's an
8 actual. So one of the main projects I worked on related to
9 contingent evaluation types of analysis, so evaluating using
10 statistical methods, whether diminishing of a well-being of
11 individuals as a result of environmental damage can be put
12 forward in the form of statistical models, as opposed to,
13 you know, just asking people how they feel about certain
14 things following an environmental event.

15 Q And what does the word "inference" connote in this
16 analysis?

17 A Well, the way that statisticians typically use it,
18 that means whether a conclusion can be drawn to a population
19 about -- from information that comes out of a sample of --
20 that's smaller than the population itself.

21 Q And the general answer to that question is: Yes,
22 right? I mean, sampling -- that's sampling, right?

23 A It depends. That's the whole idea, that there are
24 contexts in which drawing of a reliable sample is possible.

25 There's some cases in which it is not possible.

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1 There are cases in which the sample is drawn correctly.

2 There are cases in which it's not drawn correctly, so it's
3 a -- it's a fact intensive inquiry.

4 Q What are some cases where the drawing of a
5 reliable sample is not possible?

6 A I'm not sure. You'd have to give me like an
7 actual situation.

8 Q Well, I'm asking you because you said there is
9 context in which the drawing of a reliable sample is
10 possible and there are some cases it is not.

11 I'm just looking for a hypothetical of what would
12 be the case where the drawing of a reliable sample is not
13 possible?

14 A Well, one example would be when the information or
15 proxy information doesn't exist. So there has to be a
16 hypothesis about why a given sample is representative, and
17 if determination is made that it isn't representative, that
18 it cannot be used to make statistical determination, if it's
19 determined that, you know, even without being perfect it is
20 reliable enough, given certain indicia, then it may be used,
21 so that's why it's a fact-specific inquiry.

22 Q Okay. So I'm supposing reasonable economists
23 would disagree on some of these cases, whether there's
24 enough indicia that an imperfect sample may be used?

25 A It's possible. I personally have not seen in my

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1 own experience disagreements at that level. Typically those
2 are relatively clear-cut, whether a specific type of
3 information can or cannot be used, but I'm a sample of one,
4 so that's just in my experience.

5 Q Well, for example, in your survey work, haven't
6 you had disagreements with the other survey expert as to
7 whether a population is representative?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: I don't recall the specific
10 situations like that, but I certainly -- it's possible,
11 but you asked me about whether it's technically
12 possible to draw a sample from a given population, and
13 that's a very different question as to whether a given
14 population is, in fact, representative of the question.

15 So these are two very distinct questions.

16 BY MR. COLLIER:

17 Q Okay. So a survey is, by definition, a sample,
18 right, unless you happen to survey every member of the
19 group?

20 A Yes. Exactly. So it's technically -- the
21 limitations are that the maximum is the population, and then
22 it's possible to draw inferences about this population
23 occasionally with using fewer individuals that are in the
24 population.

25 Q Sometimes you can draw inferences about the survey

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1 population even if you can't prove those with, say, a
2 99 percent confidence interval, right?

3 A Sure. I mean, a 99 percent confidence interval is
4 just one of the standards that more scientists typically
5 use. Social scientists still tend to give a little bit more
6 leeway towards a 95 percent confidence interval.

7 Q Some folks use 90, don't they?

8 A With the amount of data available, it's -- there's
9 been a trend, and I know it's been pretty well-recorded,
10 including in professional literature, where with the amount
11 of data available, even in social sciences, the 95 percent
12 confidence interval has becoming a de facto standard.

13 But historically, if you look at the literature
14 from '80s and '90s, you will find 95 percent confidence
15 intervals as well.

16 Q I've lost my Elmo screen. Okay.

17 Mark 18. I'll mark Exhibit 18. And, for the
18 record, this is GOOG-AT-MDL18279549. And turn on the Elmo,
19 or if you want to pull it up. Okay, you've got it.

20 Let's look at the very first text in this matter.

21 First of all, does this appear to be a chat?

22 A It does. It appears to be a conversation with
23 multiple chats, correct.

24 Q And who is apappu?

25 A She's a Google employee and one of the custodians

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1 in this case.

2 Q Do you recognize that name?

3 A I do.

4 Q And she's been at Google a long time, if you know?

5 A I believe so. I have referenced her in my report,
6 and I believe I've provided her title as well as the maybe
7 dates of employment as well.

8 Q Okay. But you know she's a custodian in this
9 case, right?

10 A Yes.

11 Q So look at the first sentence.

12 So ABCs, it turns out Vegas is not Vegas.

13 Let's first -- let me ask you. What does ABCs
14 mean, if you know?

15 A I do not know.

16 Q Okay. Do you have an understanding what she means
17 when Vegas is not Vegas?

18 A Not specifically. I'm not sure.

19 Q But you got to guess, right?

20 MR. MCCALLUM: Object to the form.

21 BY MR. COLLIER:

22 Q Next sentence says: "Chat, in its infinite
23 wisdom, does not have a history: "Off option for rooms."

24 "That's right. Everything kept forever or until
25 garbage collected, which I think for rooms with no activity

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1 is 28 days? Nope. I lied. It's forever."

2 Do you see that?

3 A I see that, yes.

4 Q Now, does it -- does that refresh your
5 recollection as to perhaps what Google employees mean by
6 Vegas?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: I'm really not sure. I mean,
9 in the context of this particular message, it's
10 actually difficult for me to read between the lines
11 what exactly this Googler may mean.

12 I mean, it's -- it seems like it's conveying
13 some sarcasm of some sort, but I'm really not an expert
14 in interpreting chats such as this one.

15 BY MR. COLLIER:

16 Q So you see where she says -- she's writing this in
17 2019, right?

18 A Yes.

19 Q Do you see where she says: "Chat does not have a
20 history off option for rooms"?

21 A I see that, yes.

22 Q Is that true as you understand 2019?

23 A It appears that that's what Ms. Pappu is saying
24 about this particular -- her particular experience with a
25 room, but I'm not sure what she's referencing by saying

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1 that. I mean, I'm just not sure.

2 Q When she says "chat is forever," that doesn't seem
3 right to you, based on what you understand about Google's
4 policies in 2019, does it?

5 MR. MCCALLUM: Object to the form.

6 THE WITNESS: Right. I mean, it's really
7 difficult to me to interpret this particular message,
8 including in the context of what you just referenced.

9 BY MR. COLLIER:

10 Q Well, let's see if her next text helps.

11 "We need to go through a convoluted set of steps
12 to make a history off group chat in old classic hangouts and
13 then use that here. That's the only way."

14 Do you see that?

15 A I see that sentence, yes.

16 Q It's pretty clear that Ms. Pappu is -- is it Pappu
17 or -- Pappu, is -- yeah, Ms. Pappu, Aparna Pappu, is wanting
18 to take this history off on this chat, right?

19 MR. MCCALLUM: Object to the form.

20 THE WITNESS: Again, I'm not sure. I see the
21 references to this chat, and I see the sentence that
22 you've read, I just don't know how to interpret it.

23 BY MR. COLLIER:

24 Q Okay. And then she says: "[REDACTED] want to do the
25 honors"?

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1 Do you see that?

2 A I do see that sentence -- that question, yes.

3 Q And her three chats were on 9/16 at basically 2:42
4 in the afternoon, whenever time zone she's in.

5 Would you agree with that?

6 A Yes.

7 Q 14:42 means 2:42 p.m.?

8 A That would be my understanding, yes.

9 Q Okay. And then the chat jumps ahead two full
10 weeks, where another gentleman or woman comes in and says:
11 "Promo related reviews done. Whoo. Whoo."

12 Does that lead you to infer that the chat was
13 turned off for those two weeks or do you not know?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: I do not know. I mean,
16 there's -- in one of the previous chats you've showed
17 me, there was a clear indication, as, you know, update
18 language to the chat that indicated that it was being
19 turned off.

20 In this one, I didn't see it so I -- I really
21 cannot tell what might have happened in between.

22 BY MR. COLLIER:

23 Q So what we don't know from this document is
24 whether [REDACTED] did the honors of turning chat history off on
25 9/16 until someone came back and turned it on on 9/30,

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1 right, we just don't know?

2 MR. MCCALLUM: Object to the form.

3 THE WITNESS: Yeah, I cannot tell from just
4 looking at this.

5 BY MR. COLLIER:

6 Q Is there -- when you say "looking at this," is
7 there any way you know from all the evidence you've reviewed
8 given to you by Google or from other plaintiffs and
9 plaintiff's report, on how we would figure out if there was
10 missing chats between 9/16/2019 and 9/30/2019, on this
11 thread?

12 A I do not know.

13 Q Well, and you're not aware of any way we can
14 figure this out, right?

15 A I am not aware of anybody.

16 Q Are you aware of Google's DoubleClick acquisition?

17 A Not specifically. I mean, I've -- I'm generally
18 aware that Google acquired DoubleClick, but I cannot tell
19 you anything else about it. I can't even tell you when, as
20 I sit here.

21 Q Okay, 'do you know what DoubleClick was or, is,
22 or I guess it was, it was acquired?

23 A Not specifically.

24 Q Do you know if the DoubleClick acquisition is in
25 any way related to this lawsuit?

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1 A I do not know.

2 Q Do you know -- I suspect I know the answer, but I
3 have to ask.

4 Do you know at the time of the DoubleClick
5 acquisition how many DoubleClick employees were integrated
6 into Google?

7 A I -- I -- I have no idea.

8 Q If I told you there were over 900, would that
9 surprise you?

10 A I -- I couldn't tell one way or the other. If you
11 told me it was five or 9,000, I couldn't tell.

12 Q So I think I know the answer.

13 You didn't do an assessment to determine whether
14 any of the DoubleClick employees should be put on litigation
15 hold, did you?

16 A That's correct, I did no assessment at the time.

17 Q And, in fact, let me just ask it so I can save a
18 bunch of questions.

19 You didn't do any kind of assessment, it wasn't
20 within your scope or role, to determine whether the
21 individuals identified as Google custodians constituted a
22 complete list of people who should be custodians, did you?

23 MR. MCCALLUM: Object to the form.

24 THE WITNESS: That's correct. I did no
25 analysis of custodians or folks on litigation hold,

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1 that's correct.

2 BY MR. COLLIER:

3 Q Do you know how many Google Chat messages -- and
4 I'll say average or mean, if you want to say mean, if you
5 want to answer in median, that's fine, but I'm going to say
6 mean, on average, a Google employee sends on a daily basis?

7 A I do not know.

8 Q Presumably a difference per employee, right?

9 A Yes, it almost certainly does.

10 Q Do you have a messaging program at your consulting
11 firm?

12 A Not specifically a messaging program. I believe
13 CRA uses mostly Microsoft services in its environment.

14 So Microsoft Teams probably would be the closest
15 to something that would potentially serve as a messaging
16 tool, but there's no separate or like identifiable messaging
17 app that I can -- at least I'm aware of.

18 Q Do you know what CRA's retention policy is on
19 Microsoft Teams messages?

20 A I do not know specifically.

21 Q When you want to go back and search Microsoft
22 Teams messages, do you have any idea how far back you can
23 search?

24 A I do not know. It's not something I would
25 typically do. So I do not know.

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1 Q Do you know -- and if you don't know since, and
2 I'm thinking you don't know the corollary, but do you know
3 how many Google Chat messages a Google employee receives on
4 a daily basis?

5 A Yeah. I do not know.

6 Q But if Google still has access to a current
7 systemwide back end log, that would be something that you
8 could find out, right?

9 A If there's data out there that I could analyze, I
10 certainly have the expertise to do it.

11 Q Right. You understand, we talked about it before,
12 the Epic log is part of a debugging log that Google keeps,
13 right?

14 A Or at least kept at that time, yes.

15 Q It's a snapshot of how the log existed on one day
16 that went back essentially 55 to 60-odd days, depending on
17 how you wanted to define it, right?

18 A Yes, that's my understanding.

19 Q And you also have an understanding from [REDACTED]
[REDACTED] testimony that every day that log rolled off the
21 oldest day and added the new, right, it was kind of a
22 living, breathing 55 day lookback?

23 A Sure. For the debugging log, yes, that's my
24 understanding.

25 Q Do you have any understanding of whether or not

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1 that log is operational as of today?

2 A I do not have an understanding, I don't know.

3 Q If that log existed today, you would be able to
4 figure out the custodians in this case and run an analysis
5 of that log, right, on how many messages the employees sent
6 and received?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: Well, I mean, I wouldn't be
9 figuring out the custodians. That's, I believe,
10 something, you know, that counsel in this case agrees
11 on, but if I was provided a list and I was provided the
12 data, yes, I could -- I could analyze it in that
13 context.

14 BY MR. COLLIER:

15 Q Yes. And you corrected a very bad question, so
16 let me ask the question with your correction, because it was
17 not a good question.

18 If that log existed today and you would be able to
19 take the 202 custodians and run an analysis on that log to
20 determine how many of those -- how many messages each of
21 those employees sent and received, assuming they were still
22 employees at the time of the log?

23 MR. MCCALLUM: Object to the form.

24 THE WITNESS: With 99 percent confidence, I'm
25 pretty sure I could do it. I mean, bearing some

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1 unforeseen circumstance, but, yes, that would be well
2 within my expertise.

3 BY MR. COLLIER:

4 Q So why didn't you do that?

5 A You know, it's something else I was asked to do.
6 I also don't know whether a log exists or not. I was
7 specifically retained to analyze the work of Professor
8 Hochstetler in this case, and that's what I've done. I have
9 not been asked to do anything else.

10 Q So -- and I don't mean this to sound critically,
11 but is it fair to say your job was to evaluate and/or
12 criticize Professor Hochstetler's methodology but not come
13 up with your own methodology for how many chats were sent,
14 received, retained, or not retained; is that fair?

15 A I mean, that's fair. I mean, I described the full
16 extent of my assignment, but it's relatively consistent with
17 what you described.

18 Q I mean, I know you have criticisms of Professor
19 Hochstetler's methodology, and we'll discuss those.

20 But if you don't have any affirmative testimony as
21 to how many chats were sent, received, retained or not
22 retained, other than in that 60-odd day period as to the
23 five custodians, right?

24 A Yes.

25 Q And as you said, you and Mr. Hochstetler basically

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1 have agreement on that number, the five custodian over the
2 60-day period, and you're fundamental disagreement with
3 Professor Hochstetler is extrapolating or inferring from
4 that data and applying it to the other 197 custodians; is
5 that a fair summary?

6 A Right. At a high level, I'd say that's a fair
7 summary.

8 Q And because you didn't calculate your own number,
9 it could be mathematically that Professor Hochstetler's
10 numbers on chats received, chats sent, chats retained, not
11 retained, could be high or be low, we just don't know.

12 A That's -- that's, yes, exactly my point. We just
13 don't know. We cannot know using the methodology proposed
14 by Professor Hochstetler.

15 Q Do you know how many Google Chat conversations
16 Google has produced in this case?

17 A Google Chat conversations. I don't have the
18 exact number in mind, but on the order of thousands or tens
19 of thousands. I'm not sure.

20 Q How many e-mails has Google produced to the states
21 in this case, if you know?

22 A I'm not sure.

23 Q I believe you mentioned before you had reviewed
24 Mr. Hochstetler's declaration in this case, right?

25 A I have, yes.

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1 Q I'm going to hand you what I'm marking as Exhibits
2 19 and 20, all at once, save us some time.

3 Looks like maybe I had the wrong exhibit number.

4 Okay, handing you Exhibits 19 and 20.

5 And, sir, I will represent to you these are
6 Figures 1 and 2 out of Mr. -- Professor Hochstetler's
7 declaration, right? Sorry, the sticker's not cooperating.

8 So first is Exhibit 19, is the chart he did on
9 produced Google e-mails by year.

10 And you've seen that figure, right, in his
11 declaration?

12 A It looks familiar. Again, I've had little time to
13 spend with Dr. Hochstetler declaration, but I --

14 Q Well --

15 A I'm familiar.

16 Q -- and I'm not going to ask you, you've already
17 said you don't know, so now I'm asking just a cleanup
18 question.

19 Professor Hochstetler has produced a figure in his
20 declaration talking about how many Google e-mails were
21 produced by year. I mean, do you remember at least this bar
22 chart in his declaration?

23 Well, I'll tell you what. Scratch whether you
24 remember it or not.

25 Looking at Figure 1, which I'll represent to you

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1 is from Mr. Hochstetler's declaration, do you have any
2 reason to agree or disagree with the numbers of produced
3 Google e-mails by year as shown in this chart?

4 A You're jogging my memory a little bit, but I do
5 recall, I believe I had a quibble with the way that
6 Professor Hochstetler defined the word "e-mails" for the
7 purposes of this chart.

8 Q Okay.

9 A Because he had a length -- I believe it was a
10 footnote or a lengthy paragraph speaking to, I want to say
11 the -- the way he wasn't able to run the analysis to
12 de-duplicate the actual e-mails, and we've chatted a little
13 bit today about how various Bates stamps are put on same
14 exact documents, and actually in my work and experience,
15 that's always the case, that's why I'm always very careful
16 about is this the actual document I cited on my materials
17 relied upon list.

18 So my quibble was only with the e-mail definition.
19 So not with the actual mathematics of the numbers here, but
20 with what do we understand to mean the word "e-mail" in the
21 title of the chart. So that's my recollection.

22 But again, I've looked at the declaration briefly
23 I believe maybe on Wednesday is the first time I saw it, so
24 I don't have like a specific analysis that I've conducted of
25 it.

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1 Q So, yeah, I guess you've answered the better
2 question I should have asked.

3 You have not done an analysis on how many Google
4 e-mails were produced in this case by year, have you?

5 A I have not, no.

6 Q And so Professor Hochstetler's Figure 1 could be
7 right, could be wrong, it's just not within the scope of
8 something that you've reported on, other than you note your
9 quibble about how he defines e-mail; is that fair?

10 A Well, no. So just to make it clear. I -- I have
11 no reason to believe that in terms of -- without de-duping
12 or de-duplicating the e-mails that Professor Hochstetler has
13 made a mistake here and these numbers are incorrect. So I
14 have no reason to quibble with it based on the information
15 he disclosed.

16 But based on additional information he disclosed,
17 that he wasn't able to remove the duplicates from these
18 counts, that neither him nor I know what the actual number
19 of unique e-mails is, so that's my only comment that I can
20 make.

21 Q Would you assume that the number of duplicates
22 would, percentagewise, be roughly equivalent through the
23 years?

24 MR. MCCALLUM: Object to the form.

25 THE WITNESS: I honestly -- I don't know.

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1 BY MR. COLLIER:

2 Q Okay. So now I'm handing you Exhibit 21, which is
3 his Figure 2, where he calculates the produced Google Chat
4 conversations by year.

5 You aren't offering any affirmative testimony on
6 how many Google Chat conversations have occurred by year,
7 are you?

8 A No. I do not offer an opinion.

9 Q And so this -- this Exhibit 21 could be right,
10 wrong, you just don't know, because you haven't done the
11 analysis?

12 A Right. So, I mean, my only comment was, again, in
13 the context of -- would be in the context of reading through
14 Professor Hochstetler's, you know, declaration explaining
15 how he came up with the numbers, and I certainly do not have
16 any critique of the mechanics of it because I haven't
17 replicated the count itself, so my impression from reading
18 his declaration was more conceptual that, you know, if one
19 is going to compare chat conversations with e-mails, for
20 example, the question is, you know, is the chat conversation
21 the right comparison or is it a Chat message the right
22 comparison, you know, the e-mail chains are produced the way
23 where, you know, if one e-mail on top is a reply e-mail, the
24 rest of the e-mails will also be potentially produced as
25 separate e-mails.

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1 So what is the right comparison here, I don't
2 believe Dr. -- Professor Hochstetler has disclosed what he
3 believes the right comparison would be.

4 So -- so my impression of the declaration was at
5 that level, but I have no critiques as to the actual
6 numerical counts within these charts.

7 Q Okay. Do you -- looking at Figures 1 and 2 --

8 A I apologize, if I may, but just to make it clear.

9 So the documents I have in front of me. One is
10 labeled as Exhibit 19 and the other one is Exhibit 21. So
11 it seems like --

12 Q Did I skip 20? I'll ask Madam Court Reporter.

13 So I will remark this, and to save us all a bunch
14 of time, I asked you a series of questions about Figure 2,
15 and I might have called it Exhibit 21.

16 Would any of your answers change if I change the
17 exhibit number to Exhibit 20?

18 A They would not.

19 Q Okay. Then thank you for helping me. As you can
20 see as the day progresses, my administrative skills
21 deteriorate and I'll probably make more mistakes, so I
22 appreciate that.

23 Do you have -- if you look at Exhibits 19 and 20,
24 you'll see that the amount of Google produced Google e-mails
25 by year peaks in 2019, but the amount of produced Google

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1 Chat conversations peaks in 2022.

2 Do you have any understanding as to why that may
3 be?

4 A Not specifically. It would be a speculation on my
5 part.

6 Q What would be your -- your hypothesis?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: Again, it's completely
9 speculating. I mean, there's a diversity in -- among
10 the Googlers who are parts -- who are custodians and
11 are on litigation holds.

12 There's diversity over time in what I'll
13 call, you know, generational change in employees, so
14 some employees may be more comfortable using e-mails
15 versus chats.

16 So, I mean, there's various testable
17 hypotheses. But again, that's sort of generally my
18 kind of marketing analytics expertise, less so, you
19 know, what actually the answer in this case is, that's
20 not something I've analyzed specifically.

21 BY MR. COLLIER:

22 Q Well, your nice way of saying generational changes
23 of employees to a guy with a gray beard probably means you
24 would assume an old guy like me might be more likely to send
25 an e-mail than a message; is that directionally what you

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1 think?

2 A That would be my hypothesis, but it's testable, so
3 we don't know if it's true or not in this case.

4 Q And conversely, a younger, newer employee, might
5 be -- might, not tested, be more likely to send a message
6 than an e-mail?

7 A Correct. An average employee, but, of course,
8 it's -- it's, again, it's a testable hypothesis.

9 Q And just to be clear, you didn't test that
10 hypothesis as part of your work?

11 A I did not.

12 Q I will tell you, there is always an outlier,
13 because if you were to see my wife's mother, my kids'
14 grandmother, she sends a lot of messages; bad memes, bad
15 grandma stuff, but that's the purpose of an outlier, right?
16 You can get most things down to a mean, a median, and some
17 distribution type analysis, right?

18 A Maybe. I mean, there's not really a statistical
19 test for outliers, per se. There may be some rule of
20 thumbs, but there's, you know, there's a bit of a quibble as
21 to what the right approach is for treating outliers and it's
22 context specific.

23 Q And how far out the outlier is sometimes?

24 A So it's typically less about how far it is, but
25 the actual underlying reason for why it is out. Because

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1 it's not about the size of the effect, it's more about the
2 reason for the effect.

3 Q Okay. Do you know what Project Bernanke was?

4 A I'm sorry, project name was?

5 Q Bernanke.

6 A I do not --

7 Q B-e-r-n-a-k-e {sic}.

8 A I do not know.

9 Q Well, if I was to ask you questions about whether
10 chats about this Bernanke would have any relevance to the
11 case, that would be outside any opinion you're giving?

12 A Yes. I do not know what Project Bernanke is.

13 Q Are you aware that Google designed, developed, and
14 maintains control over the Google Chat product?

15 A I mean, I'm not particularly aware of it, but
16 it's -- I mean, the way you describe it sounds not
17 controversial to me.

18 Q Well, you know that Google can change the
19 retention periods applied to Google Chats, right?

20 Or if you don't know, that's fine. I shouldn't
21 have assumed you knew.

22 A I mean, if you're asking me from the technical
23 perspective, I know some changes have been made over time
24 based on [REDACTED] testimony.

25 If you're asking about the sort of control in a

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1 more kind of esoteric legal sense, I don't know, but I
2 assume it's a Google product, and Google develops it
3 internally, whether for others or for itself, so there's
4 certainly some level of control, but I don't know what other
5 legal obligations Google may or may not have related to the
6 tool, that's not within my expertise or my review in this
7 case.

8 Q And when I said "control," I didn't mean in a
9 legal sense. I meant in the who updates the code, who
10 supports the product?

11 A Yes. I mean, my understanding is that -- well,
12 actually, I don't actually know how their third-party
13 developers that Google subcontracts for the Google tool
14 itself. I really don't know actually.

15 Q Okay.

16 A And I apologize. If I may comment on, there's
17 like a sun directly going into my eyes.

18 MR. COLLIER: That's awful. I didn't notice
19 that. Let's -- let's go off the record for a moment
20 and get you sorted.

21 THE VIDEOGRAPHER: The time now is 4:10 p.m.
22 We are off the record.

23 (Recess taken at 4:10 p.m.)

24 THE VIDEOGRAPHER: The time right now is
25 4:35 p.m. We're back on the record.

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1 BY MR. COLLIER:

2 Q All right. Mr. Malkiewicz, I've placed in front
3 of you an article it appears you co-wrote.

4 Can you identify that article; is that you?

5 A Yes. That's the article I co-wrote.

6 Q And what is the title of that article?

7 A The title is: "Multi-Sided businesses: The
8 Implications of Antitrust and Regulatory Policy."

9 Q And did you publish any addendums or corrections
10 to that article?

11 A I did not, no.

12 Q As we sit here today, do you believe everything
13 you said in that article is accurate, as least as of the
14 date you wrote it, 2014?

15 A Yes.

16 Q Oh, I said I placed in front of you. I should
17 have said I placed in front of you Exhibit 21; is that fair?
18 Is it Exhibit 21 on your copy?

19 A It is Exhibit 21 on my copy, yes.

20 Q And where was that article published, or wherever,
21 I say "published," maybe it was on the Internet?

22 A We used to -- Navigant Consulting had a
23 publication that I believe was called Navigant Economics
24 magazine. So it would have been part of that publication.

25 Q And did that Navigant Economics magazine go to the

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1 Navigant clients who used or might use your economics
2 expertise?

3 A Yes. At least, I think, I mean, the distribution
4 list probably was much wider than that, but, yes, that
5 certainly -- that group would be part of a distribution
6 list.

7 Q I'm going to ask just a couple -- I'm done with
8 that, thank you.

9 I'm going to ask just a couple of questions on the
10 Google Chat history settings, some of which I've asked a
11 similar question, but I don't think I've asked this
12 question.

13 Do you agree with me that after a Google Chats
14 retention setting expires, whether or not that chat was sent
15 with history on or off, it will be deleted if the employee
16 is not under a litigation hold at that time?

17 MR. MCCALLUM: Object to the form.

18 THE WITNESS: I do not know whether
19 litigation holds work retractively for chats that are
20 preserved as part of normal policy for 30 or 18 months.
21 I do not know as I sit here.

22 BY MR. COLLIER:

23 Q I think my question's a little different than that
24 answer, so maybe I didn't ask it very well, or maybe I
25 didn't understand your answer, but let me try it again with

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1 different wordings.

2 So I want you to assume we have a Google Chat
3 message.

4 A Okay.

5 Q And its retention setting period has expired,
6 whether it's 30 days or 18 months.

7 Are you with me so far?

8 A Okay.

9 Q Whatever that period is, it has expired before a
10 litigation hold is placed on the employee. That chat,
11 although originally retained, would not be accessible by
12 Vault, correct?

13 A If a particular message or conversation is no
14 longer in Vault at the time where a litigation hold is put
15 in place, then, correct, the litigation hold would not
16 capture such a message in Vault.

17 Q Is the -- assume there's no litigation hold, and
18 assume -- assume that we're talking about a chat that has a
19 24-hour retention period.

20 Are you with me so far?

21 A Yes.

22 Q For the 24 hours, is the chat sent to Vault or is
23 it held in the Google Chats until pulled into Vault?

24 MR. MCCALLUM: Object to the form.

25 THE WITNESS: My understanding, for -- again,

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1 for the purposes of my background section in my report,
2 my understanding is it exists only within the
3 application.

4 BY MR. COLLIER:

5 Q In that case chats, Google Chats?

6 A Correct.

7 Q So even for chats that have a retention period of
8 18 months, that 18 months, those chats exist in Google Chats
9 not in Google Vault?

10 MR. MCCALLUM: Object to the form.

11 BY MR. COLLIER:

12 Q If there's no litigation hold?

13 MR. MCCALLUM: Object to the form.

14 THE WITNESS: That's not my understanding.

15 I believe based on [REDACTED] testimony,
16 where my understanding comes from, is that after a
17 24-hour period, Vault automatically collects messages
18 that did not have a history off setting.

19 So if the history setting was on, the Vault
20 would collect the information from a particular
21 conversation automatically.

22 BY MR. COLLIER:

23 Q Okay. And you talked about if it did not have a
24 history off setting in the last question, so let me ask a
25 different question.

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1 If a Google Chat message is sent with history off,
2 it will be deleted within 24 hours, it will be deleted after
3 24 hours, right?

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: It won't be saved by default
6 because it would never leave the application and go to
7 Vault, so it just won't be preserved.

8 BY MR. COLLIER:

9 Q Well, it won't be preserved in the Google Chat
10 either, right?

11 A Correct. I mean, it won't be preserved period,
12 yes.

13 Q Then the reason I say deleted is, it was preserved
14 in this hypothetical for 24 hours, right?

15 MR. MCCALLUM: Object to the form.

16 THE WITNESS: I'm not an expert in
17 terminology.

18 My understanding is that it's present for 24
19 hours, at which point -- unless it's being sent to
20 Vault, it disappears. That's -- that's the words I've
21 seen referenced.

22 I -- I do not have a particular opinion as to
23 the, you know, delete versus other type of synonyms to
24 the -- that you've been using. I certainly do not have
25 opinions on that.

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1 MR. COLLIER: Okay.

2 BY MR. COLLIER:

3 Q Are we on Exhibit 23? So I'm handing you what has
4 been marked Exhibit 22.

5 I'll note for the record that this is
6 GOOG-DOJ-29864619. Also has some other Bates numbers and
7 exhibit numbers from other cases.

8 A Okay.

9 Q Have you seen this document before?

10 A I'm just looking at the Bates stamp. I don't
11 believe it's on my Materials Considered List.

12 I mean, I may have seen the document in passing,
13 but I don't know specifically. Certainly, if it's not on my
14 Materials Considered List, I would have not seen it, at
15 least as of the date of my report.

16 Q Sure.

17 A That's for certain.

18 Q Have you heard about something called the Kent
19 Walker memo in 2008?

20 A Not specifically, no.

21 Q Well, what does specifically mean in that
22 sentence? Have you generally heard about the Kent Walker
23 memo?

24 A Oh, no, sorry. I don't know who Kent Walker is,
25 and I have not seen references to the memo is what I meant.

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1 Q Okay. I wasn't trying to be picky, it just seemed
2 like maybe you had heard about it in some way.

3 But none of this rings a bell, Kent Walker 2008
4 memo, or what you've read, right?

5 A Yeah, that's correct. I was just flipping through
6 because I see there are two people who signed the e-mail at
7 the bottom, so I was just making sure there isn't like a
8 memo attachment here or something.

9 Q Right. But that's a fair -- that's a fair
10 question.

11 Do you see at the bottom it says: "[REDACTED]
12 and Kent Walker"?

13 A Yes. That's what I was referencing.

14 Q And you don't know who Kent Walker is?

15 A I do not.

16 Q Do you know who [REDACTED] is?

17 A I also do not know.

18 Q All right. I'll represent to you that Kent
19 Walker, at the time, he's still a Google employee, but at
20 the time in 2008, he was Google's General Counsel, okay.

21 Now, looking -- you know how you read e-mails, you
22 got to look at the bottom e-mail first because they're
23 usually in some sort of reverse chronological order.

24 I'm going to go to the first paragraph under
25 Googlers.

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1 So first, whether it's [REDACTED] or Kent
2 Walker, do you see it says: "Wrote"?

3 A Yes. I see the standard e-mail reply disclosure,
4 yeah.

5 Q This looks to be a September 16th, 2008
6 communication, right?

7 A Yes.

8 Q And it's labeled: "Confidential/do not forward,
9 or please do not forward"?

10 A Yes.

11 Q It's not labeled: "Attorney-client privilege"
12 anywhere that you see, is it?

13 A Not that I can see that language now.

14 Q In his first sentence, he says -- do you agree
15 with me in the first sentence -- I'm going to say Mr. Walker
16 says, if you want to construe that as Mr. Walker and
17 [REDACTED], that's fine, can we just agree? I'm going to
18 say "Mr. Walker" because I believe that to be the author.

19 A Sure.

20 Q Even though both names appear.

21 A I have no -- I have no knowledge of the authorship
22 of this document, so whatever you tell me, I have no reason
23 to disagree.

24 Q Well, it says: "As you know, Google continues to
25 be in the midst of several significant legal and regulatory

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1 matters, including government review of our deal with Yahoo,
2 various copyright patent and trademark lawsuits, and lots of
3 other claims."

4 Do you see that?

5 A I do.

6 Q And do you have an understanding of what the
7 Google deal with Yahoo was?

8 A No, not specifically. In 2008, I don't -- I
9 wouldn't recall.

10 Q Was there any antitrust concerns about Google's
11 deal with Yahoo in 2008?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: I don't know.

14 BY MR. COLLIER:

15 Q Okay. Fair enough.

16 And so in the first sentence, he's talking about:
17 "Google faces legal and regulatory matters." Right?

18 A Yes. I see that.

19 Q And then the second sentence says: "Given our
20 continuing commitment to developing revolutionary products
21 and doing disruptive things, we're going to keep facing
22 these kinds of challenges."

23 And by "challenges," do you understand that to
24 mean challenges of the legal and regulatory matters?

25 MR. MCCALLUM: Object to the form.

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1 THE WITNESS: I mean, the only thing I know
2 about this sentence is the context of the paragraph.
3 So, I mean, it says what it says. I have no other
4 interpretation.

5 BY MR. COLLIER:

6 Q Okay. Then if we go to the next paragraph.

7 It says: "First write carefully and
8 thoughtfully."

9 Do you see that?

10 A I do see that, yes.

11 Q And then the next sentence, in 2008, Mr. Walker
12 writes: "We're an e-mail and instant messaging culture."

13 Does it surprise you that a technology company
14 like Google would be an instant messaging culture in 2008?

15 MR. MCCALLUM: Object to the form.

16 THE WITNESS: I have no basis to be surprised
17 or not surprised. I mean, I read it as a statement
18 from, yeah, whoever the author is.

19 BY MR. COLLIER:

20 Q Okay. So let's go down now to the last full
21 paragraph, and you can read any text you want surrounding
22 this, but do you see where it says: "To help avoid
23 inadvertent retention of instant messages, we have decided
24 to make," quote: Off the record the Google corporate
25 default setting for Google Talk.

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1 Do you see that?

2 A I do.

3 Q Did you know before I provided you Exhibit 23 that
4 2008 was the date that off the record or history off was the
5 Google corporate default setting?

6 A It's not something I recall specifically, but
7 based on the document you're showing me, if that's true. I
8 mean, I have no reason to -- I don't know any other set of
9 information about what 2008 might have been like at Google.

10 Q Okay. So, all right, I'll do a little drawing
11 here, we'll see how this goes.

12 All right. Setting aside my horrible chicken
13 scratch, do you agree with me that history on was the
14 corporate default policy for chats prior to 2008?

15 MR. MCCALLUM: Object to the form.

16 THE WITNESS: I mean, I don't know one way or
17 the other. I know what we've discussed and what
18 you've -- the documents you've pointed me to.

19 I haven't engaged in a forensic analysis of
20 all the documents and all the policies going back to
21 2008.

22 I focused on the policies relevant to
23 Professor Hochstetler's time period of analysis, around
24 2022. So I just don't know.

25

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1 BY MR. COLLIER:

2 Q Okay. You do know at some point prior to February
3 of 2023, the default must be history off because it's pretty
4 well-established in your report and everyone else's report,
5 as of February of 2023, history was turned on by default,
6 right?

7 A Yes, I would agree with that.

8 Q Okay. Is it relevant to your opinion, in any way,
9 if Google's General Counsel's motivation for turning the
10 default history off was to avoid documents being produced in
11 litigation?

12 MR. MCCALLUM: Object to the form.

13 THE WITNESS: For the purposes of my analysis
14 and the opinions I -- I'm offering in this case, it is
15 not.

16 BY MR. COLLIER:

17 Q So just to ask a more clean question.

18 If the Court or the jury was to find that Google's
19 General Counsel's intention in 2008 was to turn history off
20 so chats don't show up in lawsuits like this one, that's not
21 in any way relevant to your scope of testimony because your
22 scope of testimony deals essentially with the Epic chat log
23 and extrapolations from that?

24 MR. MCCALLUM: Object to the form.

25 THE WITNESS: Well, so the answer to the

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1 first part of your question, taking the representation
2 of what a hypothetical jury or the Court finds, I would
3 agree with that. I do not offer opinions on that
4 topic.

5 But the second part of your question, I stand
6 behind specific contents as I outlined in my report and
7 the opinions I have.

8 So the way you characterize it is a little
9 different than what I've specifically done to rebut
10 Professor Hochstetler's analysis, but those are the
11 bounds in which -- as I continue to sit here today,
12 even though the report was dated November 27th, I have
13 not developed any additional opinions or do not intend
14 to offer any additional opinions.

15 BY MR. COLLIER:

16 Q That's fair. I guess a shorthand way, and I mean
17 this with no criticism is, you're focused on analyzing data,
18 and you're not as concerned with people's subjective
19 intentions on why they made any switches or history on or
20 history off; is that fair?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: Certainly not in the context of
23 the time period before the, you know, 2022/2023 time
24 frame.

25 So going back to 2008, I have -- I do not

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1 provide any opinions, testimony, or given background
2 information about that time period.

3 BY MR. COLLIER:

4 Q In fact, since you think that it's unreliable to
5 extrapolate from the Epic log, you don't really offer any
6 opinions from 2022 backwards or previous, correct?

7 A Correct. I do not offer backward-looking opinions
8 from 2022, that's correct.

9 Q And you also don't offer any opinions as to any
10 custodians, other than the five that you analyzed, because
11 you think extrapolating from those five as to other
12 custodians would be inappropriate, right?

13 A I believe that's fairly correct. I mean,
14 certainly in the context of Professor Hochstetler's
15 analysis. I have not seen other analysis that have been
16 conducted with these five custodians, so I don't have an
17 opinion on any other sets of analyses, but with respect to
18 Professor Hochstetler's extrapolations, that's certainly
19 true.

20 Q I'm not aware of any other analysis of the five
21 custodians, are you?

22 A Exactly, I'm not. But I also am not privy to a
23 lot that's happening in this case, so I just want to be
24 clear.

25 Q Oh, I understand. If there was another witness

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1 that hadn't been brought up today that discussed that,
2 you're just saying "I don't know"?

3 A That's exactly right.

4 Q Okay. And do you have an understanding that --
5 I'll mark this demonstrative, just so we have it. What
6 number are we, 23?

7 All right. I'll just mark this as 23 since I'm
8 going to keep pointing to it.

9 Do you have an understanding, even though it
10 wasn't the scope of your report, whether or not from 2008 to
11 20 -- February of 2023 -- no, never mind. I'll withdraw
12 that question.

13 Do you know whether or not Google employees
14 received a training called Communicate with Care?

15 A I do not know specifically.

16 Q Have you -- even outside your work in this case,
17 have you read in the press, or anywhere, Google's policy
18 called Communicate with Care; does that ring any bells?

19 A Not in the context of policy. I mean, just
20 communicating with care more in a plain language, I may
21 have, but I don't recall a policy of that name.

22 Q Okay. I want to go back to where you testified
23 that I believe there were 202 employees under litigation
24 hold, and Mr. Hochstetler, I believe, said 141.

25 Have you seen a listing of the 202 employees put

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1 under a litigation hold?

2 MR. MCCALLUM: Object to the form.

3 THE WITNESS: No. I have not.

4 BY MR. COLLIER:

5 Q Have you looked at the letter that Mr. Hochstetler
6 relies upon to see whether Google's counsel listed 141
7 custodians, 202 custodians, or any other number, like have
8 you done a count?

9 A Yes. I mean, I don't recall specifically how many
10 were on that list. I mean, certainly more than 141 because
11 Professor Hochstetler has, you know, put a time limit on his
12 count, but I don't recall the specific count.

13 Q Well, I want to talk a little bit about Professor
14 Hochstetler's put a time limit on his count.

15 What do you mean by that?

16 A Well, I mean, we'd have to look at his report
17 exactly, I don't want to speak, because it's Professor
18 Hochstetler's work, but the way I understand it, he looked
19 at certain individuals who were put on hold as a specific
20 date, and he counted 141 individuals that met the criteria
21 he defined, and so there would have been other individuals
22 on that list, but the ones Professor Hochstetler counted,
23 you know, he has a little description in his report that
24 specify -- and I don't disagree with -- given his
25 definition, I don't disagree with the count that it's 141.

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1 Q And actually, if Professor -- are you like most
2 economists, you like the word "directionally"?

3 A Sure.

4 Q Yeah. Would you agree with me that just pure
5 math, I'm not asking whether you agree with it, but
6 directionally, if Professor Hochstetler uses 202 custodians
7 versus 141, and extrapolates from the five, as you -- as you
8 know that he did, that he would come up with a higher amount
9 of chats that were not retained?

10 MR. MCCALLUM: Object to the form.

11 THE WITNESS: Right. So they're caveating
12 with the previous discussion we've had where it
13 compounds the error.

14 If you're asking me about just
15 mathematically, you know, is two times three more than
16 two times two, yes, that's -- that's sure. Math works
17 directionally that way.

18 BY MR. COLLIER:

19 Q I wondered if you were going to work directionally
20 in.

21 But you believe the Court and the jury, when they
22 look at it, should assume that there were 202 custodians,
23 right?

24 MR. MCCALLUM: Object to the form.

25 THE WITNESS: Well, I mean, I believe I'm

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1 pretty clear in the expert report that the fundamental
2 issue is comparing the wide population in designing
3 this study around it.

4 So to the extent one is comparing, say, in
5 this case, production of documents or chats from a
6 given population, then we need to know what the
7 population is. So what is the number and who are the
8 custodians who produced the documents that -- or chats
9 that Professor Hochstetler is trying to extrapolate
10 into.

11 And since we don't even know from Professor
12 Hochstetler's report what is the exact population he's
13 trying to extrapolate, that's my first critique in the
14 report, effectively.

15 BY MR. COLLIER:

16 Q Do you know whether or not Professor Hochstetler
17 discussed that under oath in his deposition yesterday?

18 A I do not. I have not seen Professor Hochstetler's
19 testimony.

20 Q Did you see that there were employees not put on a
21 litigation hold until 2013 -- excuse me, 2023, in that
22 letter of custodians? Some employees, not all?

23 A Right. I mean, you'd have to show me the letter
24 again, but I -- it wouldn't surprise me that some of the
25 dates in the table, especially in the revised column, would

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1 have had dates as late as 2023.

2 Q Well, I'm glad you mentioned revised column,
3 because I was wondering if you were familiar with that
4 document.

5 What was the revised column, revised take into
6 account, if you know? There was an original column of
7 litigation hold date, and then as to some custodians, not
8 all, Google changed the date of the litigation hold.

9 Do you know why?

10 A I do not. I have no understanding of why.

11 Q Is -- is Google's explanation of why they changed
12 the litigation hold date relevant to your analysis?

13 A Not that I can think of as I sit here. I mean, I
14 rely on that column as the correct column in that sense, but
15 the reason why, I just don't know.

16 Q Is the date that Google put various custodians on
17 a litigation hold, say, just hypothetically, whether they
18 should have put someone on a hold in 2019 but didn't do it
19 till 2023, is any of that relevant to your analysis in this
20 case?

21 A It is not. And certainly not to the opinions that
22 I offer in this case.

23 Q So -- and I don't mean this in a critical way, I'm
24 just trying to make sure that this isn't anything you're
25 relying on.

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1 So whether Google timely put any particular
2 custodian on a litigation hold, whether they did that
3 timely, that's not relevant to any of your analysis, you
4 just take that date and perform your calculations from it,
5 right?

6 MR. MCCALLUM: Object to the form.

7 THE WITNESS: That's correct. I mean, in my
8 analysis, the -- the reason behind the date, they do
9 not matter. I mean, what matters is the date itself,
10 not the reason for it.

11 BY MR. COLLIER:

12 Q And when you analyze the -- well, never mind.
13 I'll withdraw.

14 So do you have any sense of how much storage space
15 would be required to retain the Google Chat logs for the
16 custodians in this case, we'll say for year 2022, since
17 you're most familiar with that year?

18 A I do not, no.

19 Q Do you have any sense of how much cloud and other
20 storage Google owns?

21 A So I do not have a sense for any distinctions
22 between -- for internal purposes versus for storage of
23 client information.

24 So as, you know, Google providing service to
25 others, I may have seen references not related to this case

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1 but just as a matter of personal knowledge about something
2 on the order of at least a petabytes, but I could be wrong
3 about this.

4 Q I've -- I've seen those articles, can you -- can
5 you define that term?

6 A So --

7 Q Because I stop at terabytes, to be clear.

8 A Right. So, so, so if I have it correct, I also
9 typically don't operate on those scales, but they're
10 effectively the 10 to the power 3 multiples of each other.

11 So, you know, as sort of a megabyte to a gigabyte,
12 you know, so gigabyte is a thousand megabytes, and then a
13 petabyte would be, you know, a thousand, I guess terabytes.
14 Terabytes are a thousand gigabytes. And exabyte would be a
15 thousand petabytes. And I think that's where my knowledge
16 of the scales of storage stops.

17 Q Well, and without getting into any details, it's
18 clear that Google, like Microsoft and maybe Oracle and maybe
19 another company or two, have data storage on a scale that's
20 frankly hard for us lay people to imagine, right?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: So, I mean, again, I'm
23 certainly not an expert in the area, but my sort of
24 common reading of business press, for example, would
25 suggest that really it would be between Google,

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1 Microsoft, DRS servers, AWS certainly from Amazon.

2 Oracle would be one of the companies as well.

3 IBM actually has a cloud offering as well.

4 But, again, I'm not an expert in the field,
5 just my kind of common knowledge from, you know,
6 reading business press.

7 BY MR. COLLIER:

8 Q All right. I'm going to display another
9 demonstrative here, and it may make your client very happy
10 that I went to Google with my colleague to figure this out.

11 I'm marking as Exhibit 24, my understanding of a
12 petabyte, just because I can't follow that many zeros. You
13 know why lawyers went to law school, right? They can't do
14 math.

15 Is that the number of zeros in a petabyte, to your
16 understanding?

17 MR. MCCALLUM: Object to the form.

18 BY MR. COLLIER:

19 Q I guess I could write "bytes" at the end, because
20 that's the unit of measurement, I believe.

21 Do you want to look? I don't care if you look,
22 I'm not trying to trick you.

23 A No. There's a lot of zeros on the screen, so I'm
24 trying to make sure, because, you know, it goes from bytes
25 kilobytes, megabytes, gigabytes, terabytes, and then

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1 petabytes. So I want to make sure we have enough, and it's
2 kind of difficult to do just on the screen.

3 Q You think there are more zeros?

4 A But if you represent to me that that's -- is the
5 number of zeros, I have no reason to argue against it.

6 Q Okay. But does that look right to you? I just
7 don't --

8 A It could be, yeah.

9 Q Okay. And a byte basically is a small unit of
10 information, right?

11 A Of storage, yes.

12 Q Yeah, information as stored.

13 Can we agree that a petabyte is a lot of storage
14 capacity?

15 A It's all relative, right, relative to what? Like
16 my personal laptop? Sure. Yes.

17 Q Can we agree it's a lot of storage capacity
18 compared to, say, what a bakery around the corner might
19 have?

20 Do you know any bakeries with a petabyte of
21 storage?

22 A I do not, but I also don't know many bakeries in
23 terms of their internal operations.

24 Q Okay. Is part of your work here today, you didn't
25 do any analysis as to whether or not Google had the storage

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1 capacity to retain all chats by the 202, or whatever the
2 number is, custodians, say, for 2022?

3 A Correct. I have done no such analysis.

4 Q So you don't know whether it's -- would be a heavy
5 burden or no burden at all, it might be one ten-thousandths
6 of their storage capacity?

7 A That's correct. I just don't know.

8 Q Okay. By the way, as always, if you need a break,
9 we'll take it.

10 It would be my intention to go this hour and then
11 I might go a little after a break, and then Mr. McCallum,
12 you don't have to tell me now, but I will ask at the break
13 if you intend to do a redirect, and I'll save time.

14 If you know now, that's fine.

15 MR. MCCALLUM: I'll let you know at the
16 break.

17 MR. COLLIER: Okay.

18 BY MR. COLLIER:

19 Q What is your understanding of the case that you
20 mentioned earlier in the Eastern District of Virginia?

21 A Just a general understanding that it involved
22 antitrust claims and other claims against Google specific to
23 advertising technologies.

24 Q Okay. Do you know how similar or different the
25 allegations in that case are versus the allegations in this

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1 case?

2 A No. I have not compared the allegations. I don't
3 know.

4 Q But you say in your report you're generally aware
5 that Google has produced the documents in this case that
6 were produced in the Eastern District of Virginia; is that
7 right? If you recall.

8 A I mean, that's not specifically language I use. I
9 know that for a period of time as I note in my report,
10 the -- there are various litigations that were consolidated
11 for discovery purposes, at least for a period of time,
12 before they were sent back to their representative
13 jurisdictions.

14 So, for example, the case we're sitting for today
15 has been sent back to the Eastern District of Texas.

16 So I believe that's what I describe in my report.
17 But in terms of the actual differences or similarities of
18 the claims, I do not know what exactly -- how to compare
19 these.

20 Q Well, that's sort of what I was driving at.

21 If chats were produced out of the Eastern District
22 of Virginia and you don't know the actual differences or
23 similarities of the claims in these two cases, you're
24 certainly not opining that those chats are necessarily
25 relevant to the Eastern District of Texas case, are you?

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1 A Well, so that is a little different question. So
2 I certainly have no opinions about the relevance of chats,
3 including in the case we're sitting in for today, so that's
4 point number one.

5 I mean, the other point I believe I made in the
6 report about the production out of Eastern District of
7 Texas -- sorry, out of the Virginia case, that you have
8 mentioned, is the one where I specifically included Schedule
9 3 to my report, which lists the subjects -- the sort of the
10 key words that were used to develop production of Chat
11 messages that were later, I understand, also brought into
12 this case.

13 I have no opinion of the relevance or the merits
14 related content of these messages, so I just don't know.

15 Q And the document you attached to your report with
16 the search terms, I will represent to you has no Bates
17 number.

18 Where did you get the document that purports to be
19 the search terms by Google in the Eastern District of
20 Virginia?

21 A So, I created the document. So just to be clear.

22 I -- in my practice, I use notation of schedules
23 as the work product that I have created. So you'll notice
24 Schedule 1 is my CV. Schedule 2 is typically material
25 relied upon list. Schedule 3 could be another table.

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1 If I reference something as an exhibit and I
2 attach it, that will be a document that was given to me or
3 produced, or that I've identified separately.

4 So schedules are my work product, and then
5 exhibits would be something that is a document that already
6 existed.

7 Q And the search terms in the Eastern District of
8 Virginia are a schedule, right?

9 A Correct. Schedule 3.

10 Q Which means you created it, right?

11 A Correct.

12 Q So where did you look to find the search terms for
13 the Eastern District of Virginia chats?

14 A I asked counsel.

15 Q Okay. So you can't disclose to me anything you've
16 discussed with counsel.

17 So other than your discussions with counsel, do
18 you have any source that would tell us what the search terms
19 were for the Eastern District of Virginia chats?

20 A I do not.

21 Q Have you reviewed any of the materials from the
22 Eastern District of Virginia case, such as depositions in
23 that case, or trial transcripts?

24 A So I don't recall specifically which transcripts
25 were shared under the MDL between the cases.

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1 I do know that some of the documents in my
2 materials relied upon list are Bates stamps that appear to
3 be related to the DOJ action in the Virginia case, but that
4 would be the extent of the documents I have reviewed.

5 Q In your answer, you talk about shared under the
6 MDL. What is MDL?

7 A So that's my short of calling the -- when the
8 litigation was consolidated for, you know, multi-district
9 litigation, I guess, for discovery purposes for a period of
10 time.

11 Q And was the -- to your understanding, the Eastern
12 District of Virginia case consolidated in the MDL for some
13 period of time?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: That's my understanding.

16 BY MR. COLLIER:

17 Q Looking at the Epic data, or the Epic log.

18 Do you agree with me that most Google Chat
19 conversations before February of 2023 started with history
20 off because that was the default?

21 A I don't have a specific number in mind right now
22 of the distribution, so I'm not sure.

23 Q Well, we know that a majority of the Google --
24 well, let's see if we know.

25 Do you agree with me that under your and Professor

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1 Hochstetler's analysis that the Google Chat conversations
2 you've studied as part of the Epic log generally did not
3 change the default history on or history off setting?

4 A So I know for a fact that the five custodians did
5 not change the setting during that time. I also know that
6 other members of specific chats who are not the five
7 custodians have changed the toggle, but I don't have a
8 percentage distribution in mind as I sit here.

9 Q Well, and when another member of a specific chat
10 changes the toggle, say from history off to history on, as
11 we've discussed earlier today, it still doesn't capture the
12 messages prior to that person changing the toggle to history
13 on and sending a message, right?

14 A Yeah, that's my understanding, yes.

15 Q Okay. I'll do one more quick pretty picture. It
16 may be a little hard to read, but I think you've read it
17 before.

18 So I'm marking as Exhibit 25, and I'm simply
19 asking you about the Figure 4 in his report. I know there's
20 some words around it that we didn't remove when we Xeroxed
21 it, but this, I will represent to you, is Figure 4 from Mr.
22 Hostetler' report.

23 A Okay.

24 Q Do you recall seeing this?

25 A Yes.

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1 Q A hypothetical conversation?

2 A I do recall Figure 4 in Professor Hochstetler's
3 October 4th report, yes.

4 Q All right. And on the left-hand side -- and this
5 is a hypothetical conversation, which as an economist you're
6 good with hypotheticals, right?

7 A I'm familiar about hypotheticals, but I try to
8 avoid hypotheticals, if possible.

9 Q What do you three economists on a desert island
10 with a can do when they want food?

11 A That's the reason why I call myself an applied
12 economist. I look at data and make determinations.

13 Q Are you going to finish the joke for the jury or
14 we'll just let it hang?

15 A I think we'll let it hang.

16 Q All right. Okay.

17 Figure 4. This is a hypothetical conversation.

18 On the left-hand side, it's user A and B. User A
19 and B., and they're initially having a conversation with
20 chat history off.

21 Do you see that?

22 A I see that, yes.

23 Q Okay. And then after three chats, or three Chat
24 messages, user B turns chat history on, and two more
25 messages are sent.

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1 Do you agree?

2 A I do see that, yes.

3 Q And then we go back and now user A turns chat
4 history back off after the fifth message.

5 Do you see that?

6 A I do.

7 Q And then finally, user B, not to be deterred,
8 sends a message and turns chat history back on.

9 Do you see that hypothetical?

10 A Yes, I see that step, yes.

11 Q So it's pretty clear, for whatever reason, user A
12 wanted the chat history on and user B, for some reason,
13 wanted it -- excuse me. User A wanted the chat history off
14 and user B wanted the chat history on?

15 MR. MCCALLUM: Object to the form.

16 BY MR. COLLIER:

17 Q Do you agree with that?

18 A I -- I mean, I don't recall Professor Hochstetler
19 giving anything further about this hypothetical, so I don't
20 know that he's given reasons for one way or the other, but
21 other than that, I mean, I see the steps here, yes.

22 Q All right. And would you agree with me that if
23 the conversation takes place as shown in Professor
24 Hostetler' Figure 4 with the chat history settings off and
25 on at various times, that the conversation that would be

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1 retained looks as it does to the right of Figure 4.

2 And we can walk through it, if you want.

3 MR. MCCALLUM: Object to the form.

4 THE WITNESS: I'm just trying to recall for
5 the purposes of this hypothetical whether there was
6 some discussion of a time period or which policy
7 applied, and I just don't recall.

8 I don't -- because it's not in the two
9 paragraphs here.

10 BY MR. COLLIER:

11 Q I will ask you to assume that this is prior to
12 February of 2023, because of the ability to turn chat
13 history on and off, and you can see the default is chat
14 history off, as the conversation starts on the left.

15 Does that help you?

16 A So if you represent to me that, in fact, chat
17 history off, the intended, the intention of Professor
18 Hochstetler was to say: "This is a default setting,"
19 because it doesn't really say "default" here, right, it just
20 says that at the beginning it's off.

21 Q Assume that chat history is default off at the
22 very top, where it says: "Chat history off."

23 A Okay.

24 Q So we'll just call this January of 2022, to make
25 it easy.

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1 A Okay.

2 Q Just, sir, will you look at the conversation that
3 was retained and tell me if you disagree with Professor
4 Hochstetler's analysis of which chats would be retained
5 under this hypothetical, which Chat messages, I shouldn't
6 say chats, Chat messages?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: Yeah, I'm just trying to be
9 very careful that I don't misspeak.

10 BY MR. COLLIER:

11 Q Do you want to walk through it?

12 A There's a lot of, you know, embedded assumptions
13 here, but if I have all the steps that we've discussed in
14 mind and the assumptions, if you're asking, is there a
15 situation in the context of a January 2022 conversation
16 under the existing policy, if there's a possibility of such
17 a conversation being retained in the way outlined in these
18 two sides of the table, I think it's possible.

19 Q Well, if the chat settings are as the hypothetical
20 by Professor Hochstetler says they are, it's more than
21 possible, it's just a rule-based result, right?

22 MR. MCCALLUM: Object to the form.

23 THE WITNESS: I mean, it is hypothetical.

24 So --

25 Q It's a hypothetical, where we're applying the

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1 actual real world Google rules for retention in January of
2 2022?

3 A Right. So the -- so it's hypothetically possible.
4 Did it actually happen? I don't know.

5 Q If you assume that this was the conversation that
6 took place. Do you see the heading: "Conversation that
7 took place" in January of 2022.

8 Do you want to go through it message by message
9 and we'll see if you agree? Maybe that's easier to take it
10 in a bunch of little bites.

11 A Maybe it's just the language that's used here
12 because this is a hypothetical conversation that may have
13 taken place. I don't believe this is an actual conversation
14 that took place in the way I would use the words
15 "conversation that took place."

16 Q Okay. Assume --

17 A Unless this is citing to some conversation.

18 Q Okay. Assume the conversation took place as is
19 shown on the left side of Figure 4. Can you do that?

20 I'm not telling you that this is pulled from a
21 Bates number. I'm saying assume that this is the
22 conversation.

23 A Okay.

24 Q Can we agree on that?

25 And now assume with me that the default, as shown

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1 in the top of the conversation that took place, is when the
2 first tech or the first chat was sent by user A: "Hi, are
3 you available?"

4 The chat history was off.

5 Do you see that?

6 A I see that.

7 Q And it was still off when user B said: "One sec,
8 in the middle of something."

9 Still with me?

10 A Yes.

11 Q And then assume with me that it was still off when
12 user A says: [REDACTED]

13 Still are me?

14 A Yes.

15 Q Now, based on that chat history being off, can we
16 agree as to those three texts, applying Google's rules for
17 retention, none of those three first chats would have been
18 retained as you understand the system from February --
19 excuse me, January of 2023?

20 A Yes. That's my understanding.

21 Q Okay. And now let's switch it up, because user B
22 sends the fourth text, which is: "The meeting earlier was a
23 bit of a mess."

24 Do you see that?

25 But he turned chat history on as part of that

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1 message?

2 A I see that, yes.

3 Q And then user A replies: "Everyone's so
4 political."

5 A I see it, yes.

6 Q And because the chat history was on, those two
7 messages are retained as shown in the right-hand column,
8 correct?

9 MR. MCCALLUM: Object to the form.

10 THE WITNESS: Correct. My understanding does
11 what have been sent to the Vault and retained, yes.

12 MR. COLLIER: Almost done. I know this is
13 painful.

14 BY MR. COLLIER:

15 Q Now user A turns chat history back off, and says:

16 [REDACTED]
[REDACTED]

18 A I see that, yes.

19 Q But because he turned chat history off, that chat
20 will not be retained in the conversation, will it?

21 MR. MCCALLUM: Object to the form.

22 THE WITNESS: Yes, correct. In this -- in
23 this case, yes, that's correct.

24 BY MR. COLLIER:

25 Q And then finally, user B turns chat history back

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1 on, and types in: "Yes."

2 And user A says: "Great. Have a relaxing Labor
3 Day weekend."

4 And you would agree with Professor Hochstetler
5 that under those circumstances those two chats would be
6 retained also?

7 MR. MCCALLUM: Object to the form.

8 THE WITNESS: Yes. I mean, and just to be
9 clear, I mean, I base it less on Professor Hochstetler,
10 more than [REDACTED] testimony that informs my
11 understanding, but, yes.

12 BY MR. COLLIER:

13 Q So it would be fair to say that just because a
14 conversation may have been retained, it doesn't mean that
15 every chat in that conversation was retained, correct?
16 Every Chat message, I should say.

17 A I mean, generally, I just don't know. I mean,
18 hypothetically, that's certainly possible.

19 MR. COLLIER: Okay. Let's take a break.

20 How are you feeling on redirect?

21 MR. MCCALLUM: We'll do a short one, but like
22 something on the order of 10 or 15 minutes max.

23 THE VIDEOGRAPHER: The time right now is
24 5:36 p.m. We are off the record.

25 (Recess taken at 5:36 p.m.)

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1 THE VIDEOGRAPHER: The time right now is
2 6 p.m. We are back on the record.

3 BY MR. COLLIER:

4 Q Mr. Malkiewicz, I have placed in front of two
5 documents. Exhibit 26, which is a beginning Bates number of
6 GOOG-DOJ-16741074.

7 And Exhibit 27, GOOG-NE-7385055.

8 Do you see those?

9 A I do.

10 Q Can we -- we'll start with -- even though it's a
11 little out of order, we'll start with Exhibit 27, if that's
12 okay.

13 Will you take a look at that and let me know when
14 you've had a chance to look at it?

15 A Okay. I've reviewed the document.

16 Q Okay. Exhibit 27, would you agree with me,
17 appears to be an e-mail from [REDACTED] to Sundar Pichai, [REDACTED]
[REDACTED] at Google.

19 Do you agree with that?

20 A I do.

21 Q And it was sent on November 7th, 2014, according
22 to the e-mail?

23 A Yes, that's what it appears.

24 Q And who is Sundar Pichai?

25 A He's the CEO of Google.

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1 Q Okay. And in this, [REDACTED]
[REDACTED], is
3 giving some sort of update to Sundar Pichai, and others.

4 Right?

5 A Yes.

6 Q If you'll turn with me to -- under "Launches,"
7 where it says: "Hangouts for work." It will be halfway
8 down the first page.

9 A Okay, I see it.

10 Q Do you see that it says: "As early as Wednesday,
11 November 12th" -- and can we assume that that is
12 November 12th, 2014, from the date this e-mail was sent?

13 A That would make sense.

14 Q Okay. I'll start reading it over now because I
15 interrupted myself.

16 "As early as Wednesday, November 12th, we'll be
17 rolling out two new features for Hangouts for Work--the
18 admin option to force Hangouts chat history in your
19 organization to be off, parens, or on, and introducing
20 Google Apps Vault Support for Hangouts chat. Blog post in
21 the works."

22 Do you see that?

23 A I do.

24 Q The first new feature for Google Hangouts was
25 called the admin option to force Hangouts chat history in

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1 your organization to be off or on.

2 Do you see that?

3 A I do.

4 Q Do you remember earlier today, many hours ago, I
5 believe you didn't know whether or not Google had the
6 technical ability to force Google Chats, or in this case,
7 Google Hangouts, to have history on or off?

8 A I mean, I recall generally our conversations, not
9 specifically. I believe we chatted about -- or you
10 questioned me about a individual level history on/off,
11 policies and technical implementations.

12 This seems to suggest, you know, as a sort of
13 admin right to comprehensively turn it on or off, to the
14 extent that distinction matters for your question.

15 Q Okay. So can you agree with me that if Ms. Lin is
16 telling the CEO of Google the truth, in a few days, in the
17 future, in 2014, they were going to roll out an admin option
18 to force Hangouts chat history to be on or off?

19 MR. MCCALLUM: Object to the form.

20 THE WITNESS: I apologize. I missed the
21 question stem of the -- of your question.

22 MR. COLLIER: Probably I didn't say it
23 clearly. So let me try again.

24 BY MR. COLLIER:

25 Q Do you agree with me that as of November 2014, the

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1 CEO of Google was being informed that they were rolling out
2 the admin option to force Hangouts chat history in your
3 organization to be off, parens, or on.

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: That's what it appears from
6 this e-mail.

7 BY MR. COLLIER:

8 Q And Hangouts, we've discussed, is the -- just the
9 prior versions of Chats, right?

10 A Yes. For the purposes of our conversation, yes.

11 Q Do you have any understanding why Google didn't
12 force Chats history to be on for nine years after this
13 e-mail?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: I do not.

16 BY MR. COLLIER:

17 Q Okay. Now if you'll look with me at Exhibit 26,
18 and you can look at whatever you want, but I'm going to just
19 tell you. I'm just going to ask you about the few
20 paragraphs on Bates number ends in 1077, rolling onto 1078,
21 which is called: "New Policies for Hangout Chats."

22 I mean, feel free to look at the whole thing.

23 A Okay.

24 Q All right. So let's first go back to the date of
25 the e-mail to orient ourselves.

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1 Is this an e-mail sent by whoever is at
2 [REDACTED]?

3 A That's the e-mail address the e-mail came from,
4 yes.

5 Q And it was sent on March 9th, 2015, right?

6 A Yes.

7 Q Okay. So if we turn to page, the fourth page of
8 this document ending in Bates Number 16741077, which has a
9 heading: "New policy controls for Hangouts chat"?

10 A Okay.

11 Q What do you understand from this document about
12 what the new policy controls in the beginning of 2015 were
13 for Hangouts chat?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: I do not have a specific
16 understanding as of the time period.

17 BY MR. MCCALLUM:

18 Q Okay. Can you see with me that in 2015, March of
19 2015, there's a new policy control for Hangouts chat, you
20 can see that, right?

21 A I see the reference to that here, yes.

22 Q And then under the description of the new policy
23 controls, it says: "Admins will now see two new options in
24 the Hangout chat settings in the admin console, allowing
25 them to" -- first bullet -- "require only Hangouts chat to

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1 be used," and two: "Force Hangouts chat history to be on or
2 off."

3 Do you see that?

4 A I see that, yes.

5 Q What's your understanding of what it means to set
6 a setting in the admin console?

7 A I don't have a specific understanding, so I don't
8 want to misspeak. I could only speculate.

9 Q Are you aware that generally when there's a
10 program in a company, some people have admin or
11 administrative privileges and can change settings that other
12 users cannot?

13 MR. MCCALLUM: Object to the form.

14 THE WITNESS: So, that was my layman's
15 understanding before you showed me this document, but
16 because you showed me this document, I can see that the
17 admin console in the previous version of hangouts did
18 not actually give admin rights the right to disallow
19 users from doing certain things, so that's where my
20 prior was overwritten.

21 MR. COLLIER: Okay.

22 THE WITNESS: Yeah. So that's where my
23 confusion comes in based on this actual document in
24 front of me, but I'm not an expert in that area so I
25 don't know.

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1 BY MR. COLLIER:

2 Q So the confusion is, it appears that in 2014,
3 admins could not yet require only Hangout chats to be used,
4 right?

5 MR. MCCALLUM: Object to the form.

6 BY MR. COLLIER:

7 Q If this is a 2015 change?

8 MR. MCCALLUM: Object to the form.

9 THE WITNESS: Right. So that bullet point, I
10 actually do not know how to interpret it. I don't know
11 what does it mean: "Require only Hangouts chat to be
12 used," quote-unquote.

13 I don't know how to interpret that.

14 BY MR. COLLIER:

15 Q Well, as opposed to A-I-M, for example, AIM?

16 MR. MCCALLUM: Object to the form.

17 BY MR. COLLIER:

18 Q AOL Instant Chat, right, does that sound
19 reasonable?

20 A I don't know if third-party tools were allowed at
21 Google at the time to begin with, or if this is relative to
22 something else. I just really don't know.

23 Q All right. Well, let's talk about the second
24 bullet, because I think this one will be clearer.

25 No later than March of 2015, if you believe this

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1 document, admins could force the Hangouts chat history to be
2 on or off, right?

3 MR. MCCALLUM: Object to the form.

4 THE WITNESS: That's my reading of this one,
5 yes.

6 BY MR. COLLIER:

7 Q And then as it continues: "While admins could
8 previously default all Hangouts chat conversation history to
9 on or off, chat participants could change this on a
10 per-conversation basis."

11 Do you see that?

12 A I do.

13 Q What does that mean to you?

14 A I can only read off the plain of meaning. So
15 literally what it says that even with the history defaulting
16 to off, chat participants could change this on a
17 per-conversation basis individually, independent of what the
18 admin setting was to begin with.

19 Q Okay. And then the next sentence says: "With
20 this new feature, admins can ensure chat participants cannot
21 change this setting for new conversations."

22 Do you see that?

23 A I do.

24 Q So if we know the default history for Google
25 Chats, or Google Hangout at the time, was history off, this

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1 would lead you to believe that after March of 2015, chat
2 participants could not change the setting for new
3 conversations; is that right?

4 MR. MCCALLUM: Object to the form.

5 THE WITNESS: Well, had the admin folks
6 actually enforced that feature, they had the ability to
7 enforce it at organizations that this particular
8 Hangouts was rolled to.

9 So I -- I haven't read this document in
10 detail, so I don't know if this refers to the
11 third-party deployments or if this is a Google-specific
12 document, I don't know.

13 Because the previous one we looked at seemed
14 to be directed at the Hangouts for work at other
15 organizations. I don't know about this one.

16 BY MR. COLLIER:

17 Q As we sit here today, you don't know whether or
18 not this is talking about Google Hangouts as is delivered to
19 Google customers, or Google Hangouts as is used within
20 Google at the time; is that what you're saying?

21 A Yes, that's correct. I just don't know one way or
22 the other. It's possible it's either.

23 I just -- I'm not familiar with this document, so
24 I don't know.

25 Q Okay. I will hand you Exhibit 28, which does not

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1 have a Bates number, and I will represent to you that this
2 comes from Footnote 48 of Mr. Grande's expert report.

3 At the following link. I'll put it on the Elmo so
4 everyone can see it.

5 Google workplaces -- excuse me.

6 Google workspace updates new admin policy and
7 compliance controls for Google Hangout chats.

8 Have you seen this figure before? Did you go to
9 look at it when you saw Mr. Grande's report?

10 A I don't believe I did. It doesn't -- I do not
11 recall that -- seeing that particular footnote source, or,
12 in fact, 2024 documentation for Google Hangouts, so I'm not
13 sure.

14 Q Well, I think the 2024, sir, is the date he says
15 visited. That's a way of -- I'm sure you've done something
16 before.

17 That's a way of letting people know what version
18 you looked at, but if you look in the hyperlink, I believe
19 you'll see a date of 2013.

20 A I see it now, yes.

21 Q Okay. But if you're not familiar with it, that's
22 fine.

23 Do you know, if this was Exhibit 28, was actually
24 a setting screen on or about 2013 to 2015 for Google admins
25 for Google Hangouts?

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1 A I do not, no.

2 Q Do you see here if it is the admin setting, that
3 there's a box -- by the way, I didn't draw these blue
4 arrows. I know I said I'd tell you whenever I highlighted.
5 I didn't draw these blue arrows. They are actually in the
6 Google document.

7 Do you see the bottom -- well, we'll start at the
8 top.

9 First, there's an option set for Hangouts chat,
10 Hangouts chat, or Google Talk, or Google Talk only.

11 Do you see that?

12 A I do.

13 Q That would lead you to believe that this admin
14 setting would be somewhere in the period at which Google
15 Hangouts was converting to Google Talk, right?

16 MR. MCCALLUM: Object to the form.

17 THE WITNESS: That would make sense, yes.

18 BY MR. COLLIER:

19 Q And do you recall roughly what period that was? I
20 know we discussed it earlier.

21 A 2013/2014 would ring a bell.

22 Q Okay. And I'm not asking you to swear to an exact
23 date, I was just wanting to -- somewhere in the range of
24 2013 to 2014. Okay.

25 And if we look under: "Chat History," do you see

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1 there's an option for all new Hangout chat conversations.
2 You can either turn history on or history off, and under
3 this particular setting: "Don't allow users to change the
4 setting."

5 A I do see that, yes.

6 Q Do you have any understanding of what "don't allow
7 users to change the settings" means, from context in the
8 document.

9 A Just what the plain meaning of it says, and in the
10 context of the -- one of the two previous exhibits we've
11 discussed, the plain meaning to me makes sense. "Don't
12 allow users to change this setting."

13 Q And this setting meaning the history is on history
14 is off setting referenced above, right?

15 A Or Hangout chat conversations, correct.

16 Q Yep. Okay. Almost done. You can put that away.
17 I want you to imagine with me that there is -- I'm
18 going to call him or her the honest Googler.

19 A A Google employee who's -- and that's not to imply
20 Google employees are dishonest, but a Google employee who is
21 doing their best to follow all litigation and preservation
22 requirements.

23 Are you with me so far?

24 A Okay.

25 Q Let's pretend -- well, let's hypothesize that this

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1 Google employee received a litigation hold in 2020, and
2 after receiving the litigation hold in 2020, she
3 participated in chat conversations where other participants
4 would occasionally turn history off, even if it was turned
5 back on later.

6 A Okay.

7 Q You've looked at the litigation holds in this
8 case. In fact, I've given you one of them, right?

9 A Yes. I don't know that I've reviewed a complete
10 list of litigation hold notices or instructions, but I've
11 certainly reviewed some, the ones that I cite in my report,
12 as well as, you know, the one we discussed already today.

13 MR. MCCALLUM: Counsel, which one was the
14 litigation hold that you provided?

15 MR. COLLIER: My stack's buried. If you want
16 to turn to it and look at it. It should be in your
17 official stack.

18 THE WITNESS: So I do see a retention policy
19 that's Exhibit 13 that has a section that speaks to
20 legal holds.

21 Is that the document we're --

22 BY MR. COLLIER:

23 Q Do you call that a -- do you call that a -- wait.
24 Have you reviewed -- I'm sorry. That's the retention
25 policy.

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1 Have you reviewed the litigation holds issued by
2 Google to individual employees? Not the retention policy
3 that applies broadly, but when an employee is put on a
4 litigation hold, have you reviewed those litigation holds?

5 A I have reviewed documents that, again, I don't
6 know about the legal terminology, but, for example, that
7 would have specific instruction that I've summarized in my
8 report that would talk about, you know, how to use certain
9 communication tools given the litigation hold, or to
10 notarize specific -- or note specific discussions about the
11 content's subject of the litigation hold.

12 I'm not sure if that's what you're referring to,
13 but those were the ones I cited in my report.

14 Q And of the litigation holds cited in your report,
15 none of those litigation holds instructed an employee how to
16 preserve chats that were sent pre-February of 2023 with
17 history off, did they?

18 MR. MCCALLUM: Object to the form.

19 THE WITNESS: I don't recall specific
20 language about that.

21 BY MR. COLLIER:

22 Q So each of those employees would just have to
23 figure out a way to preserve that if they wanted to, in
24 whatever mechanism they thought best, right?

25 MR. MCCALLUM: Object to the form.

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1 THE WITNESS: I don't know what was the
2 total, you know, extent of communications with
3 litigation hold recipients, so I cannot speak to that,
4 that's not part of my analysis or opinions in this
5 case.

6 BY MR. COLLIER:

7 Q None of the documents you've reviewed in this
8 case, including the litigation holds, to your memory,
9 instructed a Google employee how to preserve chats that were
10 sent pre-February 2023 with history off, right?

11 MR. MCCALLUM: Object to the form.

12 THE WITNESS: That's fair. Limiting to
13 documents I have reviewed, I do not recall, as I sit
14 here, such documents.

15 BY MR. COLLIER:

16 Q Did you review unredacted or redacted litigation
17 holds in this case?

18 A I do not recall as I sit here.

19 MR. COLLIER: Pass the witness.

20 MR. MCCALLUM: Take five minutes.

21 MR. COLLIER: Sure.

22 THE VIDEOGRAPHER: The time right now is
23 6:24 p.m. We are off the record.

24 (Recess taken at 6:24 p.m.)

25 THE VIDEOGRAPHER: The time right now is

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1 6:38 p.m. We're back on the record.

2 EXAMINATION

3 BY MR. MCCALLUM:

4 Q Hello, Mr. Malkiewicz. Just a couple of follow-up
5 questions that I wanted to ask you.

6 You submitted an expert report in connection with
7 this case, right?

8 A Yes.

9 Q Are there any corrections that you'd like to make
10 to that report?

11 A Yes.

12 Q What are those corrections?

13 A Well, in my review of the report, I noticed that
14 in one of the footnotes, specifically Footnote 151, I
15 inadvertently left out three Bates stamp document citations
16 that refer to the three conversations the footnote cites to
17 within the context of that sentence.

18 I meant to include three documents that are on my
19 Materials Considered List, but I inadvertently excluded them
20 from that Footnote 151.

21 Q And for Mr. Collier's benefit, I think we can just
22 send you a short e-mail that contains those minor
23 corrections. Thank you, Mr. Malkiewicz.

24 Earlier today you testified that you are not an
25 expert in antitrust law, but that you have expertise in

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1 antitrust economics.

2 Do you recall that testimony?

3 A Yes.

4 Q Have you been asked to give -- have you been asked
5 to opine on any antitrust economics issues in this case?

6 A No.

7 Q Outside of your role as an expert, do you have any
8 personal opinions about antitrust economics issues in this
9 case?

10 A I do not.

11 Q Earlier today, Mr. Malkiewicz, you testified that
12 you had read Mr. Grande's expert declaration and opinions
13 served last week?

14 A I have, yes.

15 Q And having reviewed that material, did it change
16 any of the opinions that you gave in your expert report?

17 A It did not.

18 Q When you read Mr. Grande's report, is there
19 anything about the report or the declaration that surprised
20 you?

21 MR. COLLIER: Objection. Form.

22 THE WITNESS: Well, it struck me that what
23 Mr. Grande characterizes as his -- as my opinions that
24 he comments on, are not, in fact, my opinions.

25 I could not identify Mr. Grande's opinions

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1 of -- my actual opinions that I offer in this case.

2 BY MR. MCCALLUM:

3 Q And when you say you could not identify, what do
4 you mean?

5 A I've reviewed Mr. Grande's report, and I noted
6 that what appears to -- I just could not identify the
7 contents of the report that specifically spoke to the
8 opinions that I offer in this case.

9 Q You were asked some questions earlier today about
10 the custodians in the case, and there were a couple of
11 different numbers that we used. There was 141 and 202 and
12 some other numbers.

13 Do you recall that testimony?

14 A I do.

15 Q What's your understanding of the 202 number that
16 was referred to in that testimony earlier today?

17 A So my understanding is that the documents produced
18 in this case have come from 202 individual Google employees.

19 Q And do you know if that 202 figure is the same
20 universe as the number of Google employees on litigation
21 holds in this case?

22 A I don't know.

23 Q Do you have any understanding of the number of
24 Google employees on litigation hold in connection with this
25 case?

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1 A I do not.

2 Q Earlier today you were asked a question by Mr.
3 Collier, and the question was: "You haven't done the
4 mathematics that one would do to determine the statistical
5 significance of Dr. Hochstetler's conclusion, correct?"

6 Do you recall being asked that question?

7 A I do.

8 Q And you answered: "It would be inappropriate to
9 do that at the level of analysis that Professor Hochstetler
10 has conducted."

11 Do you recall giving that answer?

12 A I do.

13 Q Why was that -- why would it have been
14 inappropriate to do that at the level of analysis that
15 Professor Hochstetler as conducted?

16 A Well, that's because, you know, applying
17 statistical methods to a bias sample, such as the one that
18 Professor Hochstetler used, would not provide a statistic
19 that's meaningful in the context of the population that's
20 particularly being analyzed.

21 Q Well, sir, without doing that math, how can you
22 opine that a sample size is not statistically significant?

23 MR. COLLIER: Object to form.

24 THE WITNESS: Well, again, if the sample is
25 not representative of the population at issue, then any

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1 mathematical calculations of the statistical
2 significance would not provide a meaningful statistic.

3 BY MR. MCCALLUM:

4 Q You were asked a couple of questions this
5 afternoon about admin controls.

6 Do you recall that -- those questions and those
7 answers?

8 A I do.

9 Q Did you ever study the details of admin controls
10 for the version of Hangouts or chats that was being made
11 available to Google's customers?

12 A I did not.

13 Q Do you know whether the customer or the external
14 version of those tools tracked the features of the version
15 Google was using internally at any point in time?

16 A I do not.

17 Q You were shown some documents this afternoon
18 from -- concerning what was described as an update to Google
19 workspace customers in 2015.

20 Do you recall seeing those documents?

21 A Just today, yes.

22 Q Were you speculating about the details of that
23 update when you responded to those questions?

24 MR. COLLIER: Objection. Form.

25 THE WITNESS: Yes.

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1 BY MR. MCCALLUM:

2 Q Do you know whether or how for the customer
3 version of chat or Hangout, an administrator could ever
4 actually go on a user-by-user basis to determine whether
5 they could be prohibited from changing retention to history
6 off?

7 A I do not know.

8 Q And just before we finished up a short while ago,
9 you were asked a question by Mr. Collier, and the question
10 was: "None of the documents you have reviewed in this case,
11 including the litigation holds, to your memory, instructed a
12 Google employee how to preserve chats that were sent
13 pre-February 2023 with history off."

14 Right? Do you recall being asked that question?

15 A I recall that, yes.

16 Q And your answer was: "That's fair. Limiting to
17 documents I have reviewed, I do not recall as I sit here
18 such documents."

19 Was that your answer?

20 A I believe so, yes.

21 Q And was that answer accurate?

22 MR. COLLIER: Objection. Form.

23 THE WITNESS: No. I misunderstood the date
24 in the question.

25

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1 BY MR. MCCALLUM:

2 Q And so -- having now had the question repeated to
3 you, including the 20 -- the pre-February 2023 date, what
4 would be your answer to that question?

5 MR. COLLIER: Objection. Form.

6 THE WITNESS: Well, I have seen and cited
7 litigation hold notices from before 2023. That
8 specifically instructed Googlers receiving such
9 litigation holds as to, you know, specifically how they
10 should go about document preservation, including
11 instructing them not to have conversations of substance
12 related to the litigation hold if they can avoid on the
13 chat tool, but instead, use e-mail or other means that
14 can be preserved, and to the extent that they have to,
15 in fact, use the chat tool, to turn the history on in
16 such instances.

17 MR. MCCALLUM: Thank you. Mr. Malkiewicz, no
18 further questions at this time.

19 EXAMINATION

20 BY MR. COLLIER:

21 Q Mr. Malkiewicz, as to the question you just gave a
22 different answer to, to your memory, none of the documents
23 reviewed in this case, including the litigation holds,
24 instructed a Google employee how to preserve chats that were
25 sent pre-February 2023 with history off.

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1 You changed your answer to that question, right?

2 A Correct. I misunderstood the date in the original
3 question, so I misspoke.

4 Q Did you -- I asked you that question right before
5 you took a break to meet with counsel, didn't I?

6 A I believe so. Yes.

7 Q Did you review any litigation holds or anything
8 during that break?

9 A I did not.

10 Q So before the break you had one answer, and then
11 after your break with counsel you came back with a different
12 one; is that fair?

13 A That's correct. I literally believe -- I believed
14 that I've heard you say before 2020, not 2023, and thus my
15 answer was correct for your question, but with the date
16 2020.

17 Q Okay. So, let me just make sure I understand.

18 None of the documents you've reviewed in this
19 case, including the litigation holds, instructed a Google
20 employee how to preserve chats that were sent
21 pre-February 2020 with history off, right?

22 MR. MCCALLUM: Object to the form.

23 THE WITNESS: That's correct. And I stand
24 behind my answer in the context of the year 2020.

25

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1 BY MR. COLLIER:

2 Q Okay. And then you told Google's counsel, if we
3 change that question to pre-February 2023, you have a
4 different answer, right?

5 The answer being: "Yes, I've seen documents"?

6 A I mean, I have not told anything of that kind to
7 Google's counsel.

8 MR. MCCALLUM: If I can clarify.

9 I think we're on the same page, that Mr.
10 Collier's asking about the testimony that you just gave
11 a few moments ago.

12 MR. COLLIER: Exactly. I'm not asking what
13 you talked about with counsel in your room. I'm
14 saying -- let me ask you a better question.

15 BY MR. COLLIER:

16 Q So after the break when your counsel asked you the
17 same question, you came back with a different answer because
18 you heard the date 2023, right?

19 A Correct. It's purely a matter of a date, yes.

20 Q Exactly. So when -- at what date does your answer
21 change as to when you believe the first time a Google
22 employee was instructed how to preserve chats that were sent
23 with history off, what's that date?

24 MR. MCCALLUM: Object to the form.

25 THE WITNESS: So to the best of my

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1 recollection, without, again, reviewing the materials
2 relied upon in my list in detail, as I sit here, I
3 specifically recall those instructions, at least as of
4 2021, maybe 2020, but I'm not confident about 2020.

5 BY MR. COLLIER:

6 Q Okay. And are you referring to -- when I say --
7 or when you say there's a document in that 2020/2021 range,
8 are you referring to litigation holds?

9 A Correct.

10 Q And you believe they instruct an employee how to
11 preserve because they have an instructions such as, do it on
12 an e-mail and various other things, right?

13 A That's fair. I mean, I have detailed quotes from
14 those documents included in my expert report.

15 Q Early on in response to your counsel's
16 questioning, you said you didn't need to run the mathematics
17 because Professor Hochstetler used a biased sample.

18 Do you recall that?

19 A Yes, I do.

20 Q And just so I can link-up what you said in your
21 report with what you said here, is the reason you think
22 Professor Hochstetler used a biased sample because he used a
23 sample of convenience?

24 MR. MCCALLUM: Object to the form.

25 THE WITNESS: Well, no. These are two

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1 separate issues, but they go together.

2 So in my opinion, this sample that Professor
3 Hochstetler used is a biased sample of convenience. So
4 it's both a biased sample, but it's also a sample of
5 convenience.

6 BY MR. COLLIER:

7 Q So let's take it in two pieces. What makes it a
8 biased sample?

9 A The fact that it's not representative of the
10 population it is intended to extrapolate onto.

11 Q And how do you know the five employees are not
12 representative of other Google employees?

13 A Well, I provide detailed analysis in my report,
14 some of it we've already discussed today, including, for
15 example, the very unique roles of two out of the five
16 individuals.

17 I go in my report into much more detail about, for
18 example, you know, another custodian out of the five has not
19 been involved in, for example, the ad tech business at all
20 since, my understanding, 2019 or before, so there are other
21 characteristics of those particular individuals that when
22 extrapolating onto 2022, and other years, would make them
23 not representative of the population that Professor
24 Hochstetler has been studying, which is presumably the 141
25 custodians, not to mention the 202 individual employees,

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1 whose documents have been produced as part of this
2 litigation.

3 Q So I'm clear, when you say it's a biased sample,
4 you're not alleging that Professor Hochstetler was biased,
5 right?

6 A That's correct. The bias is related to the
7 sample. Not to an individual, yes.

8 Q You're not alleging that Professor Hochstetler
9 used a bias sample because he selected certain individuals
10 over others, are you?

11 A Not specifically, other than in the context maybe
12 of [REDACTED] inclusion or exclusion from certain types of
13 analyses, but overall, yes, I mean, that's the other part of
14 critique, which is it's a sample of convenience.

15 It's not a sample that Professor Hochstetler has
16 selected or designed with the population he intended to
17 study in mind.

18 Q What is a sample of convenience, generally,
19 outside the scope of this case?

20 A Just generally, it's data that's -- or a sample
21 that's available for individuals with a target population
22 that a researcher has access to for reasons unrelated to the
23 selection process, but simply because the sample is
24 available.

25 Q Isn't in the economic literature, a sample of

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1 convenience, the convenience part means a sample chosen for
2 the convenience of the researcher?

3 A Not necessarily. I mean, its -- its availability
4 is convenient in a sense in like a common use of the term,
5 but it does not -- it does not mean that someone has to
6 actively seek convenience. It simply is available because
7 it's ready for someone to use.

8 Q Isn't the textbook kind of statistics 101
9 definition of a sample of convenience, when, say, a
10 university professor wanting to know the attitudes of all
11 undergraduates, merely takes a survey of the students in his
12 class because they're there and then tries to extrapolate
13 the survey of the students in his class, right?

14 MR. MCCALLUM: Object to the form.

15 THE WITNESS: That could be one example.

16 There are other situations that, you know, the sample
17 may already exist. Maybe the students already answered
18 the questions, and those answers are available and,
19 thus, the professor does not go and question the
20 students to begin with.

21 So there are many different situations in
22 which a sample of convenience comes into play.

23 BY MR. COLLIER:

24 Q But you'd agree with me, sir, that a sample of
25 convenience, as defined in the literature, focuses on the

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1 sample selection by the researcher was for their convenience
2 as opposed to selecting an available representative sample
3 or the complete universe?

4 A I'll put this way, that's a more fair
5 characterization than the previous one you offered.

6 MR. COLLIER: I'll pass the witness.

7 MR. MCCALLUM: No further questions.

8 MR. COLLIER: All right. Thank you.

9 THE VIDEOGRAPHER: The time right now is
10 6:55 p.m. We are off the record.

11 (Deposition concluded at 6:55 p.m.)

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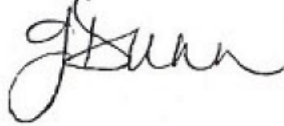
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CERTIFICATE

I, Jennifer A. Dunn, Registered Merit Reporter,
Certified Realtime Reporter, Certified Shorthand Reporter,
and Certified Court Reporter, do hereby certify that prior
to the commencement of the examination, Michal
Malkiewicz, was duly sworn by me to testify to the truth,
the whole truth and nothing but the truth.

I DO FURTHER CERTIFY that the foregoing is a verbatim
transcript of the testimony as taken stenographically by me
at the time, place and on the date hereinbefore set forth.

I DO FURTHER CERTIFY that I am neither a relative nor
employee nor attorney nor counsel of any of the parties to
this action, and that I am neither a relative nor employee
of such attorney or counsel, and that I am not financially
interested in the action.



JENNIFER A. DUNN

NCRA Registered Merit Reporter

NCRA Certified Realtime Reporter

California Certified Shorthand Reporter #14461

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Missouri Certified Court Reporter #485

Texas Certified Shorthand Reporter #12050

Dated: December 18, 2024

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INSTRUCTIONS TO WITNESS

Please read your deposition over carefully and make any necessary corrections. You should state the reason in the appropriate space on the errata sheet for any corrections that are made.

After doing so, please sign the errata sheet and date it. You are signing same subject to the changes you have noted on the errata sheet, which will be attached to your deposition.

It is imperative that you return the original errata sheet to the deposing attorney within thirty (30) days of receipt of the deposition transcript by you.

If you fail to do so, the deposition transcript may be deemed to be accurate and may be used in court.

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ACKNOWLEDGMENT OF DEPONENT

I, MICHAL MALKIEWICZ, do hereby certify that I have read the foregoing pages and that the same is a correct transcription of the answers given by me to the questions therein propounded, except for the corrections or changes in form or substance, if any, noted in the attached Errata Sheet.

MICHAL MALKIEWICZ_____
Date

(Reported by: Jennifer A. Dunn, RMR, CRR, CCR & CSR)

Subscribed and sworn to before me this _____ day of _____, 20 ____.

My commission expires: _____

Notary Public

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ERRATA SHEET

WITNESS: Michal Malkiewicz

IN RE: The State of Texas v. Google

Upon reading the deposition and before subscribing thereto,
the deponent indicated the following changes should be made:

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[means - michal]

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[needs - oath]

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[object - oh]

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[opinions - parkway]

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[right - sarcasm]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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